QL
684
N7R25

REED

BIRDS OF NEW YORK

THE LIBRARY
OF
THE UNIVERSITY
OF CALIFORNIA
LOS ANGELES

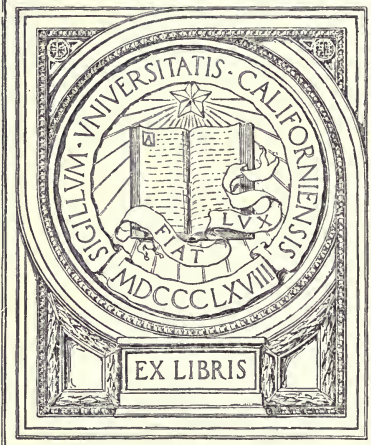
QL
684
7R25

WILD BIRDS

of

New York

THE GIFT OF
FLORENCE V. V. DICKEY
TO THE
UNIVERSITY OF CALIFORNIA
AT LOS ANGELES



THE DONALD R. DICKEY
LIBRARY
OF VERTEBRATE ZOÖLOGY

Chipping Sparrow

WILD BIRDS

— OF —

NEW YORK

BY

CHESTER A. REED, S. B.

40 COLORED ILLUSTRATIONS

MOHONK SALESROOMS
MOHONK LAKE, N. Y.
1912

Copyrighted, 1912
Chas. K. Reed
Worcester, Mass.

QL
684
N7R25

550773

BIRDS OF NEW YORK

This little book is not expected to give everyone a complete history of the birds of this state. To do so would require an immense volume. But it is designed to bring to the attention of the reader the most common, the most interesting and the most valuable birds and to create an interest which it is hoped will be the means of starting many on a more extended study of our most interesting fauna. In the last few pages is a quite complete list of New York birds and concise data in regard to their occurrence.

As might be expected considering the size and location of the state, a very great many species occur or have been taken here. The sandy beaches and mud flats of Long Island furnish an ideal retreat or resting place for all sorts of water fowl and shore birds.

The Carolinian Area of the Austral Zone extends to Long Island and the Lower Hudson Valley; hence a great many southern species occur, species that otherwise would be very unusual in this latitude, such as Kentucky, Hooded and Worm-eating Warblers. The greater part of the state is in the Alleghanian Area of the Transition Zone and produces all the species that should occur in this latitude,

B 4825

while many boreal species are commonly found in the Canadian Area of the Boreal Zone which is found in our mountains. Added to the birds of regular occurrence in various parts of the state, are those which have strayed here by accident or through wanderlust; many such are recorded, some being European birds and others from our southern or western states.

While many species, especially water and game birds and birds of prey, have steadily decreased in numbers, it is believed that many others, especially warblers and sparrows are more abundant now than formerly. If our agriculturalists will only be a little less zealous in cutting off all dead limbs which are required by woodpeckers and titmice, if they will avoid when possible late plowing, early mowing and grass burning and if they will leave entrances to their barns for swallows and to their sheds for phoebes, many species will not only hold their own but increase in numbers and be worth more than their weight in gold in the end. Birds are now recognized as a great state and national asset. If we all do our part in protecting them and teaching their value to others, we can make this asset a permanent and increasing one.

Everybody knows and likes ROBINS. They are desirable birds in every respect,—handsome in plumage, sweet songsters and valuable not only because of the good cheer their presence carries with it but because they destroy quantities of insects that are destructive to our crops, our trees and our lawns. In reality they are not Robins at all for the Robins are only Old World birds, but they properly belong to the Thrush family.

They are really to be classed as migrants although a few of them remain here throughout the winter. In March, they again come in numbers, frequenting our lawns, shade trees, roadsides and orchards.

Who has not watched a pair of these favorites racing over the sward, each alternately running a few steps then pausing to listen; every few minutes, one will hesitate, peck sharply at the ground and bring forth a long angle-worm. Robin nests are mud and grass affairs placed usually on limbs or in crotches of trees rarely on fence posts, porches or other unusual places.

Included in the Thrush Family are some of our very sweetest songsters, such as the Robin, the Hermit and Wood Thrushes. All birds of this family are quite remarkable because their young in the first plumage have their breasts spotted with blackish and their backs marked with whitish, even though those of their parents are plain. All our eastern thrushes agree, too, in that their eggs are some shade of blue, usually unmarked.

Although a few BLUEBIRDS pass the winter in the state, chiefly in warm swamps, they are usually regarded as migrants and their return in spring is eagerly awaited. They come the latter part of February and their cheery warbles greet us from orchard and roadside. As Burroughs, in his charming manner, explains in "Wake Robin": —"When Nature made the Bluebird she wished to propitiate both the sky and the earth, so she gave him the color of one on his back and the hue of the other on his breast, and ordained that his appearance in spring should denote that the strife and war between these two elements was at an end. He is the peace-harbinger; in him the celestial and terrestrial strike hands and are fast friends."

Cavities in trees or posts furnish suitable home sites

WOOD THRUSHES are the largest and handsomest of the true thrushes, easily distinguished from any other either by plumage or by song. From a musical standpoint the song of this species has few, if any, competitors. The clear full notes are given with an undertone that gives the effect of a stringed accompaniment. It appears to be a sort of yodling tune, using all the vowels, like a-e-o-lu, uoli-uoli-uoli-a-e-o-lee." Reproductions of bird songs in print never can give anyone an adequate idea of even the simplest song, but after the song has once been heard, the written version will at once recall it to mind. The favorite haunts of these birds are damp woodlands, along brooks or in swamps; occasionally too they will take up their quarters in the shrubbery of estates and may be sometimes seen feeding on the lawns, but as a rule I have found that they are glad to keep a safe distance from humans. Their nests, composed of leaves, grass and some mud, are placed rather low in forks of bushes or trees.

within which to lay their very pale blue eggs and rear their young. They are real sociable chaps and, provided that English Sparrows are properly suppressed, will occupy bird houses or boxes in our very dooryards.

The true Thrushes are represented by several species, most conspicuous of which are the Wood, a picture of which is shown here, the Hermit, the Olive-backed Thrushes and the Veery. Of these, the first and last are common summer residents and the Hermit breeds locally, chiefly in mountainous regions. These four Thrushes are very easily identified, the Wood by the many round black spots on its breast; the Hermit by its olive back, rufous tail and lightly spotted breast; the Olive-backed by its uniform olive colored upper parts; and the Veery by its uniform bright rufous upper parts and very faintly streaked breast.

While the two species are sometimes seen in the same locality, as a rule Wood Thrushes are birds of larger, moist woods or swamps and VEERIES most often found in more open woods or thickets. While the song of the Veery cannot compare with those of the more gifted Wood and Hermit Thrushes, it is one to readily command attention, a loud, round, ringing, echoing, descending spiral, not in the least

The tiniest of our winter resident are GOLDEN-CROWNED KINGLETS,—little mites but four inches in length; scarcely bigger than hummingbirds yet capable of enduring our most severe cold weather. Some of them wander through cities and towns gleaning a scanty fare of insect eggs and pupae from shrubs and trees, but the majority pass the winter in pines where they can obtain much better shelter.

The voice of this species corresponds to its size,—just a faint, high-pitched "tsip," audible but a few yards away. In spring and summer they utter a queer little song consisting of half a dozen very shrill, high-pitched notes and ending in a short warbling,—a song that would suggest a warbler but that is very different from that of any of our warblers.

Their nests are rather bulky, semi-pensile structures of twigs, mosses, rootlets and feathers in coniferous trees. The interior is so deep that nothing can be seen of the sitting bird.

resembling that of any other bird. The Veery nest is made of stripes of bark and dead leaves, on the ground or within a few inches of it. The four deep blue eggs are almost constantly covered by the little mother for well she knows that while they might attract the attention of passers by, her colors so harmonize with the surrounding leaves that there is little danger of her discovery.

With the exception of Robins and Bluebirds, all thrushes are rather timid, shy and retiring, prefering deep woods rather than the open. For this reason it is difficult to positively recognize some of the less common species as they pass through on their biannual pilgrimages.

On cold wintry days, should we venture into the woods, tiny lisping voices may greet us from the dense tops of pine trees. The authors are difficult to discover but if we persevere we will make them out to be wee little birds scarcely bigger than the thumb, by name Golden-crowned Kinglets. If we chirp to them we may arouse their curiosity enough to bring them down where we can get a good look at them. How can such tiny mites keep the spark of life aglow when the mercury is hovering below zero?

Another little Kinglet, the RUBY-CROWNED, is wiser

WHITE-BREASTED NUTHATCHES are acrobatic tree climbers. They may be seen running over trunks or limbs of our woodland trees in all conceivable positions. We are accustomed to say that woodpeckers have stiffened tail feathers to assist them in clinging to and climbing trees, yet here is a bird with no special development of tail or feet which is incomparably better, for not only do they climb upward faster but they can run down tree trunks, head first, equally as easily.

The term Nuthatch is derived from the supposed habit of European species of "hatching" at or hacking nuts to get at the kernels. It would have to be a very thin shelled nut for our species to break but he is an adept at prying up pieces of bark to get at eggs or larvae of insects that are hidden beneath. As might be expected of birds which are constantly about the large limbs or trunks of trees, Nuthatches nest in cavities. The usual note of this species is a nasal "yank, yank," but in spring they utter a loud, rapid, tenor "hah-hah-hah-hah-etc."

for he spends the winter far enough south to escape severe cold and only returns in spring to spend a few days with us while the warblers are passing north. We find this species chiefly in pines from the tops of which their delightful songs, surprisingly loud and clear for such tiny creatures, float down to us.

Some birds are climbers, some clingers, some creepers and some flutterers, but Nuthatches are more than all these, they are acrobats of the highest order. The whole woods are their gymnasiums and every tree is part of their apparatus. With the exception of enlarged toe nails, Nuthatches are not apparently better adapted for an athletic life than many other birds but no others can equal the ease and agility with which they clamber up, down and around branches or tree trunks.

Of our two species, the White-breasted Nuthatch is the most abundant and is resident throughout the year. RED-BREASTED NUTHATCHES, which may be recognized not only by their smaller size and ruddy under parts, but by the black stripe on each side of the head, are abundant during migrations and many of them nest in mountains. They frequent coniferous trees almost exclusively.

HOUSE WRENS are the best known of our wrens. They cannot help being seen or heard.

The song of the House Wren is a most spontaneous outburst and can only be described as a loud, liquid, bubbling warble. The most pessimistic person living could not listen to this song and watch the actions of the singer without taking a brighter view of life.

It is very interesting to watch them while nest building. Their sites are holes in trees, fence posts, bird houses, etc. It is customary for them to use many twigs, sometimes quite lengthy ones; an experienced wren will carry such by the end and find no difficulty in getting it through the small opening to their home, but sometimes one not as wise will fetch a stick by the middle and its contortions as it tries to get inside or to get the twig in, are very interesting. The hollow of the nest is lined with grass and feathers to make a soft bed for the numerous eggs.

The family of Titmice is well represented by our common CHICKADEE. Chickadees are most sociable birds among themselves, with other species and also with man. In winter they will come about our houses, provided we have trees in our yard, gleaning insect eggs and pupae from the twigs and feeding upon suet and nuts that many kind people put in suitable places for them. Often they become so tame that they will alight on the hand and feed from the palm. Who could help loving such saucy little midgets with black caps and bibs, as they swing from the tips of the branches and call cheerily to us with a "chickadee-dee-dee." Sometimes, too, they whistle to us, a clear, high-pitched "phe-be."

In summer, they make homes by digging out cavities of decayed limbs, sometimes in orchard trees, again in trees by the roadside, but most often in old birch stumps in small woods. They are very cleanly in their habits at all times. This is well shown by the condition of the nests even when a stump of small diameter is occupied by a large number of young.

The Wren family is a very musical one. Of our several representatives, the best known is that boisterous species known as the HOUSE WREN, or more familiarly as

Our black-capped, gray CATBIRD is familiar to nearly everyone. Even should anyone not know the bird he would immediately call it a Catbird once he heard its mewing call. Thickets and briers are the favorite resorts of this species. While his mate is busy with household cares, the male spends a great deal of time in the tops of one of the higher bushes composing new songs. Catbirds are not as good a mimic nor as pleasing songsters as Mockingbirds, although but few of our birds can equal or excel them. Their performance is spoiled somewhat by the introduction of various harsh or squealing and cat-calls.

They arrive from the south about the first of May and, with very little delay or confusion, become mated and commence building their nests of twigs and rootlets in some thicket. The four eggs that constitutes a set are a bright greenish-blue, much deeper colored than those of Robins.

"Jenny Wren." They always seem to me like animated, feathered music boxes, filled almost to the bursting point with melody. They are well named House Wrens for they are seldom found far from habitations and prefer to make their homes in orchard trees or in bird boxes erected for them on the premises.

In late fall and early spring and sometimes during the winter we may see a tiny brown bird with up-turned tail creeping about through walls, piles of brush or in thickets. This also is a wren, the WINTER WREN. If we approach too closely in order to get a better view, he will dive down into the brush and scold with a deep chattering note. In spring, our attention may sometimes be attracted to them by a loud, clear, ringing and business-like song that is, perhaps, a better performance than that of the House Wren but given less often and without the unrestrained enthusiasm of the latter bird. A few Winter Wrens nest in mountainous or higher portions of our range but the majority of them pass beyond our border to Canada.

The large CAROLINA WREN, which is so abundant and noisy in our southern states occurs north locally to southern New England and New York.

Our three representatives of the Thrasher family, the Catbird, Brown Thrasher and Mockingbird, are wonderful

REDSTARTS are the most active of the fly-catching warblers. They are not passive waiters like true flycatchers but dash hither and yon, high and low, snatching insects from the air, from the foliage or from the ground. Their nervous activity is constantly shown by the opening and closing of their handsomely marked tails and the fluttering of the wings. When not engaged in feeding or singing, the male is often to be seen chasing his mate or other birds about the tree tops, not in a pugilistic but in a playful manner.

Redstarts arrive from the south about May 4th, their coming being heralded by a flashing of orange and black through the trees or by an energetic jingling "ser-wee, swee-swee-sweet." If we watch the female closely about two weeks later we will find her gathering fine strips of bark, plant down, fibres and other similar material and carrying it to the fork of a tree or sapling where she forms a very compact and neat nest.

vocalists. Indeed, it is doubtful if any birds anywhere can equal the repertoir of these. MOCKINGBIRDS, as mimics, cannot be equaled. For hours at a time they will perch in the top of a bush and sing almost steadily, making up the song as they go along and taking familiar parts of the songs of many other birds. Unfortunately they are southern birds, occurring within our borders only locally and in limited numbers. Their place is well filled, however, by the abundant Catbirds which, although not nearly as capable songsters as the Mocker, have few other species that can compare with them.

BROWN THRASHERS, abound in nearly all first growth land and in bush-dotted fields or pastures. They are not mimics like Catbirds and Mockers but have a long, clear and very pleasing song of their own,—easily recognized because each phrase or group of notes is repeated twice. The song is not only fuller and richer but contains none of the harsh and mewing notes such as the Catbird likes to insert into its lay.

Warblers, of which we have many species, are among our most active and most interesting birds. The Redstart, which is shown here, belongs to a group known as Flycatching Warblers as they have a habit of dashing out and catch-

"Witchity-witchity-witch" sing the MARYLAND YELLOW-THROAT from his retreat in the thicket. And he is a veritable woodland witch, in the midst of every fracas that starts in the neighborhood, equally happy whether singing or scolding and the Yellow-throat can scold more roundly than any bird I know unless it be the House Wren. They are the watchmen of their haunts; none can approach without their sounding the alarm by a loud chattering, rattling call.

They arrive from the south about May first and remain until October. In suitable localities they are one of the most abundant of birds. They nest on or very near the ground, making a comparatively bulky structure of strips of bark and grasses. It is usually very well concealed among weeds or young shoots or saplings and is quite difficult to locate without flushing the bird. They are often imposed on by Cowbirds and made to hatch and care for one of their young; sometimes we see them feeding husky young Cowbirds twice as large as themselves.

ing insects on the wing similar to the manner in which flycatchers feed. Others of this group are Canada Warblers and Wilson's Warblers. CANADA WARBLERS are very beautiful in appearance and are easily distinguished by the slate colored upper parts, the bright yellow under parts and the prominent necklace of black spots across the lower throat. During migrations they may occur in underbrush in woods or may visit the shrubbery about our houses. They have a loud, ringing, clearly whistled song that is very distinctive when one becomes familiar with it. They nest in favorable localities throughout New England and New York. Swampy places are preferred, especially those in which spoonwood or laurel abounds. I have found several nests imbedded in mossy banks only a few inches above water and others under roots of laurel where suitable crevices existed.

WILSON'S WARBLERS, we know only as migrants. They are very active and we may often see them in orchards flitting about apple or cherry blossoms catching the many insects to be found there. More of them may be seen, though, if we hie away to the birches along some body of water for they are very fond of such localities.

OVEN-BIRDS are one of the most abundant of our woodland warblers, and during May and June their presence anywhere can hardly be overlooked for they are very persistent singers and the loud and peculiar song will attract the attention of anyone. In type this song is well rendered by "teacher, teacher, teacher, teacher, teacher,", delivered in a chanting tone with a gradually increasing volume towards the end. They are ground warblers, feeding chiefly from the ground and nesting among the dead leaves. The nest is built of grasses and rootlets and is arched over the top with grasses, pine needles, leaf stems, etc., shaped like an old fashioned Dutch oven,—hence the name of these birds.

Their four or five eggs are white with specks of reddish-brown chiefly about the large end.

Male and female Oven-birds are alike in plumage and in color, form and markings are suggestive of thrushes,—hence formerly they were erroneously termed "Golden-crowned Thrushes."

YELLOW-BREASTED CHATS, which are abundant in southern states, reach their northern limits in central New York and southern New England. They are the largest of the warbler family and are among the queerest of all birds. The Chat song is a wonder and revelation to all who hear it,—given intermittantly and composed of the strangest jumble of clear whistles, barkings, quackings, mewings and croakings that ever came from a bird's throat. They are mimics of a high order and also seem to have the power of ventriloquism for it is often very difficult to determine the location of the bird from his song. They are very shy and, although we may be only a few feet from them in the tangled thicket of briers, it is almost impossible to catch sight of them for they keep just beyond our vision chuckling audibly at our discomfiture. The Chat may easily be recognized because of its large size, greenish back, ashy crown, bright yellow breast and prominent white stripe over the eye.

If we visit pitch pine or Jack pine woods or groves, we will probably hear from some of the tree tops a rather monotonous trill. Search will reveal a small quite dull plumaged bird but with the breast more or less brightly tinged with yellow. It is the PINE WARBLER one of the least

Handsomest of all the warbler tribe is the exquisite BLACKBURIAN WARBLER which arrives about May 10th just as the buds of the white oak are commencing to unfurl. If we wish to see them to the best advantage we may do so in parks or in orchards for there they will be found low down, but if we wish to be most certain of finding them we go to woodland containing white oaks and locate them by means of their song. They will be found in the tops of the trees where they can be seen with difficulty, but you can count on their being there if it is the proper time.

The Blackburnian song is a very characteristic one but is of a wiry character that requires the keenest of ears to catch as it floats down from the tree tops,—a thin, high pitched "swee, swee, swee, swee-e-e-e-e" the final ending ascending until its pitch is almost beyond the human ear drum to receive.

Blackburnian Warblers nest sparingly in mountains of New York and New England but most of them pass beyond our borders.

attractively gowned species of this large family. Unlike most species they are quite sluggish in their actions, creeping about among the upper branches with none of the dash that we expect from most warblers. Many birds are silent during the heat of the summer months but this species trills almost as freely at such times as during spring.

Two of our warblers are clothed wholly in black and white, the Black-and-White Warbler and the Black-poll. BLACK AND WHITE WARBLERS are abundant summer residents, returning to us about the latter part of April. They are readily identified as they are quite heavily streaked with black all over and the black crown has a central white stripe. Their song is a very thin and wiry one, so high pitched as to almost seem like a hiss,—composed usually of three syllables each long drawn out. We usually see them creeping about branches and trunks of small woodland trees with a celerity nearly equal to that of nuthatches. Their nests are very well concealed at the bases of stumps or saplings. BLACK-POLL WARBLERS arrive late, usually about May 18th and pass on beyond our borders to breed. The male may easily be distinguished from that of the last species because the crown is solid black. Their notes are

Like bits of golden sunshine, YELLOW WARBLERS flit about our orchard and shade trees as well as among the alders and willows of swamp or brookside. Coming toward the end of April, they remain with us until late in September. For the first two months the males sing very freely, a sharp "sweet, sweet, sweet, sweeter." The song of this species is similar to that of the Redstart and also the Chestnut-sided Warbler but anyone soon becomes familiar enough with them to distinguish that of each species.

Their nest, too, is quite like that of the redstart but usually contains more plant down and less fibres and bark; the lining is usually of fine rootlets or hairs. One of the handsomest nests I ever saw was built almost wholly externally of white cotton obtained from waste of a near-by mill. Their eggs are bluish-white, specked with black and umber,—easily distinguished since the eggs of most of our warblers have a pure white or creamy background.

thin and wiry but consist of a half dozen or more syllables with a pause between each and with a peculiar rising and falling of volume. They are comparatively sluggish in all their actions.

Thickets, first and second growth land or clearings are always well populated with CHESTNUT-SIDED WARBLERS, birds easy to name because they have a chestnut stripe on each side of the breast and a bright yellow crown. Their song is similar in character to that of Redstarts and Yellow Warblers but the differences are readily apparent when one becomes familiar with them. Their nests are located in the tops of low bushes a foot or so above ground.

One of the commonest of spring migrants is the MYRTLE WARBLER, easily recognized by their four yellow spots, one on the crown, one on the rump and one on either side of the breast. We find them equally abundant either in orchards or open woodland. They have a deep-toned chirp, unlike that of any other species, and a short, rather pretty trill.

Another interesting species, and one of the smallest of the family, is the PARULA WARBLER. They were formerly known as "Blue Yellow-backs" as the upper parts are a blue-gray and there is a brownish-yellow patch in the

About the middle of April, our woods may resound with a lazy, drawling bird song,—a "per-e-o, per-e-a" repeated intermittantly with a slight undertone, often interspersed with a silvery little trill and perhaps ending with a series of petulant rasping notes. It means that SOLITARY or BLUE-HEADED VIREOS have arrived. During migration they may often be seen in orchards as well as in the woods, but when the nesting season comes, if we would see them, we must go to their haunts in remote or swampy woods. None of our Vireos, except the White-throated, are timid, but this species is the most fearless of all. They pay little attention to your presence at any time and when nesting they have several times allowed me to approach closely enough to stroke the back of the sitting bird. The nest, which is a basket of strips of bark, cobwebs, moss and fine rootlets, is swung from the fork of a bush or sapling. The three or four eggs are creamy-white with a few reddish-brown specks about the large end.

middle of the back; below, they are yellow, with a more or less distinct band of brownish spots on the chest. When they first arrive we may see them and hear their lisping trills in orchard or woodland trees; at this season they are most abundant in the tops of young oaks. Later they retire to many of our swamps,—those containing dead trees that are festooned with Usnea moss. Their nests are made by turning up the ends of some of this hanging moss and lining the hollow so formed with hair.

Of the five species of vireos which are commonly found in our range, the RED-EYED VIREO is the most abundant. All through spring and summer months, the song of the Red-eye is one of the most familiar sounds of woodland. It is a deliberate but incessant series of phrases uttered in a colloquial manner with a short pause between each,—described aptly by Wilson Flagg as, "You see it—you know it—do you hear me?—do you believe it?" This species usually swings its basket-like nest at low elevations from forks in bushes that comprise the undergrowth of woodland. The Red-eye can easily be identified since it has a light stripe over the eye and a blackish edge to the gray crown.

BARN SWALLOWS are one of our best known species since they are so closely associated with dwellings in our rural communities. Any time after April 15th, they may be seen skimming over pond, meadow or along country roads with that grace of motion peculiar to swalows. They often alight on dead twigs, telephone wires and sometimes on the ground, but their feeding is entirely done while on the wing and the food consists almost wholly of tiny flies or gnats.

Apparently they remain mated for life for the same pairs return to the same place year after year, usually building a new nest each season, close to and often on the same site of the old. The nest is made of pellets of mud, fastened to the side of a beam or rafter,—half-bowl shaped and warmly lined with feathers. Whenever possible, they make use of a projecting knot or splinter of wood to help hold the nest in place. The five or six eggs are creamy-white, spotted all over with reddish-bown.

WARBLING VIREOS have a dull plumage with no conspicuous marking, but they have a lively warbling song of a few seconds duration which readily identifies them. They are abundant in orchard and shade trees and trees along the roadside. Their homes are swung among the outer branches of these trees usually quite high above ground. WHITE-EYED VIREOS may be known because they do actually have white eyes; they also have a yellowish ring about the eyes and yellow on the flanks. They frequent thickets and brier patches,—just such places as we may find Chats and, like them, he is a skulker rarely seen but in evidence by his loud and sharply whistled song, which is quite varied and mimics that of other species.

Earliest of the swallows to arrive in spring are TREE or WHITE-BELLIED SWALLOWS, which come the latter part of March or early in April. All swallows are very useful birds economically, for their food is practically entirely of insects.They are very graceful in flight, tireless of wing and many have nesting habits of unusual interest. The present species builds in holes in trees or in small bird houses erected for them. BANK SWALLOWS, a small gray species with lighter underparts and a band across the breast, nest in holes in banks, their tunnels extending in

As a rule brilliantly plumaged birds are too gaudy and not as handsome as many whose colors are of less startling hues. SCARLET TANAGERS are an exception to this rule and are not only bright colored but are beautiful. The colors, scarlet and black, make a pretty combination and on this species there is just the proper amount of each color to get the best effect.

They arrive from their winter quarters in the tropics, the first week in May and remain until October. For a week or two after coming they may be seen not only in woods but sometimes on orchard trees or shade trees in cities, but after they have settled down for the season, they are to be found chiefly in woods preferably those having occasional pines. They can always be found by their peculiar song, which might be likened to that of a very hoarse robin, the notes having a harsh, grating undertone. Their nests are composed of twigs and rootlets, lined with very fine rootlets. The four eggs are greenish-blue, specked with brown.

one or two feet and terminating in an enlarged chamber.

CLIFF or EAVE SWALLOWS have a plumage similar to that of Barn Swallow, but the tail is not forked, the rump is buffy and the forehead very lightly colored. This species builds a flask-shaped nest of pellets of mud, attaching them on the outside of buildings under the eaves or on the faces of cliffs. As usual with swallows, they nest in colonies. Then there is that large and well-known species, the PURPLE MARTIN, the male of which is glossy purplish-black all over. Many of them now commonly nest in bird houses erected for them, but the majority cling to the habits of their ancestors and nest in cavities of trees.

CEDAR WAXWINGS are known to nearly everyone, either by this name or as "Cherry Birds." Many a farmer complains that with "Cherry Birds" and Robins stealing his cherries, he is unable to get any for his own use. True, they do like cherries and, while from choice they will take wild ones, they do damage cultivated ones to some extent. But they can be frightened away so that they will not return to certain trees, and the farmer should also remember that these birds, as well as many others do him an immense service by destroying the many insects they do. Cedar

While many birds are prominently marked with yellow and brown, very few have any blue in their plumage. By far the most brilliant of our blue birds are INDIGO BUNTINGS. They arrive the first week in May and immediately repair to their favorite haunts which are dry thickets or patches of briers, preferably on hillsides. The males are in full song when they arrive and continue singing until the middle of July, —long after most of our songsters have become silent. Their song is a very musical one, nearly as good and somewhat resembling that of the Goldfinch and recalling certain passages from that of our household canary. His best vocal efforts are always made from an elevated position, usually the top of a bush or small tree overlooking his nesting grounds.

The sparrow-like female is rarely seen unless we come close to her nest, when she will appear and add her deep chirps of protest to those of her mate. The nest is close to the ground in brush or weeds.

Waxwings not only glean vermin from the branches, but they often dash out after passing insects, flycatcher-fashion. Waxwings are handsome birds. In fact I know of no other species whose plumage is always so sleek. They may easily be recognized by their soft brownish-gray plumage, conspicuous crest and band of yellow across the tip of the tail. Many male Waxwings have peculiar hard, red, sealing-wax-like appendages to the tips of many secondaries and sometimes on the ends of the tail feathers. Usually they are very quiet and sedate in their actions and are always quite silent; in fact their only note is a lisping, high-pitched "tsee", often repeated, but in such a soft, hissing tone as to be audible for but a short distance. Except during the nesting season, which occurs early in July, later than most other birds, they are to be found in small companies. Birds frequently feed their mates, but Waxwings are even more chivalrous, for they feed not only their own mates, but have been observed when a number were in a cherry tree, to pass fruit about from one to another several times before it was finally eaten.

The Shrike family comprises many species, most of which inhabit the Old World. Only two species are found in North America, and both of these are at times seen in our

Only in a few favored localities do we have a chance to see and hear the southern Cardinal, but we have in the ROSE-BREASTED GROSBEAK a species that is even more delightful during the period that they are with us, which is from about May 10th until September 1st. This grosbeak is most beautifully arrayed in black and white, with a large, pink, cravat and patch of the same under each wing. The song of this species is incomparably better than that of the Cardinal, in character midway between that of the Robin and the Baltimore Oriole, but better than either because composed of such clear, mellow and silvery notes. The song is almost invariably preceded at an interval of about one second with a sharp, metallic chip. I know of no other species that thus gives warning of his performance so everyone may be in readiness to listen. The grosbeak's nest is a rather frail structure of twigs and rootlets, placed in trees or bushes in second growth woods or sometimes in our shade trees.

range. Our species are about the size of a Robin, gray and white, with blackish wings and tail, and a black patch on the sides of the head. NORTHERN SHRIKES do not nest within our borders, but appear regularly every winter. We may see them perched in trees by the roadside, on fence posts or making their way with much flapping of the wings across the fields. During the greater part of the year, Shrikes feed upon insects, chiefly grasshoppers; they also at times catch small birds and mice, and since, in winter, they cannot obtain insects their food must almost wholly consist of such. Their hooked beaks enable them to easily tear their prey, but their feet are not constructed for firmly holding it consequently they find it convenient to impale birds and sometimes insects on thorns or barbs of wire fences in order that they may accomplish their purpose. Sometimes, too, their booty is merely hung up to be used at a future time, for they have the habit of often killing more than they wish at the time. They often appear in cities and catch English Sparrows on the streets or about buildings, becoming so bold and fearless when very hungry that they often allow themselves to be caught rather than relinquish a bird that they have caught.

MIGRANT SHRIKES, a northern sub-species of the

In just such places as Indigo Buntings are found, TOWHEES will always be present, namely dry thickets and bush-covered side hills. The male Towhee is modestly but handsomely clothed and his mate, although not gowned as brightly as he, is also very pretty.

The call note, given by both sexes, is a distinctive sharp "cherink," with the accent on the last syllable. It is this call that gives them one of their common names, Chewink or Cherink. They are very excitable birds when anyone is near their nest and will flutter about with spreading tail, cherinking at the tops of their voices.

The song, which is given by the male only, is a characteristic "pil-tow-hee-e-e-e," the last syllable tremulous. Two or more of them will take their station in the leafy tops of their favorite trees and sing back and forth for hours early in the morning and again towards sundown. The Towhee nest is built on the ground, under a bush or clump of weeds. The white eggs are finely dotted with reddish-brown.

Loggerhead Shrike, sometimes occur locally during the summer. They are smaller than the last species and the under parts are plain white, while the breast of the larger species is lightly barred with dusky.

Such a magnificent species as the CARDINAL must be mentioned even though it is a southern species and only extends its range north to southeastern New York and southern New England. They frequent underbrush and thickets and are more heard than seen even in their southern haunts, where they are quite abundant. Their songs are many and varied, chiefly composed of series of clear whistles, sometimes in couplets. They are resident wherever found, although it seems very much out of place to see birds of such plumage about when the earth is covered with a white mantle.

Space will allow of but mention of a few of our most important and common species of Sparrows. Largest of these, and one of the first to appear in spring, are FOX SPARROWS on their way to their breeding grounds in boreal regions. They are as large as some of the thrushes, have a bright rufous tail, mixed gray and brown upper parts and heavily spotted under parts. We see or hear them as they are scratching among the dead leaves; if we

In a few places, especially near the coast, SONG SPARROWS remain throughout the winter, that is a small number of them do. The majority, however, like Robins and Bluebirds, which winter under similar conditions, pass the coldest weather in our southern states. Early in March see them back in their old haunts and we can safely say that everyone is delighted to again hear their friendly voices uplifted in song. Their song is a very merry little jingle, the drift of which can be gotten from the words, "Maids, maids, maids, put on the kettle-ettle-ettle." The song varies indefinately with different individuals and sometimes the same one has several renditions, but they all have the same well known twang.

They frequent the shrubbery of our yards, roadsides and thickets, building their grass nests either on the ground or close to it in bushes or patches of weeds. The eggs are bluish-white, heavily spotted with brown. Song Sparrows are easily identified since the streaks on the breast tend to form a distinct blotch.

approach they hop into view and chip or move off through the woods uttering a shrill complaining note as they leave. Sometimes we may hear their songs, which are very sweet and varied, but their best music is reserved until they reach their home lands.

JUNCOS or Snow Birds are abundant during spring and fall migrations and a few of them pass the winter with us, while others also stay and nest in our mountains. We usually see them in flocks, often in company with Fox Sparrows and Tree Sparrows. Nearly everyone knows them—gray birds with white outer tail feathers and white under parts sharply defined against the gray breast. Besides a sharp alarm chip, they often sing a very sweet little trill, which is most pleasing when delivered in concert.

CHIPPING SPARROWS are most sociable of all. They return to us early in the spring and take up their quarters in our orchards or shrubs about our houses; sometimes they even build their little nests of rootlets and hair in vines covering our porches. They are not in the least timid and will hop about the lawn almost at our feet, hunting for beetles and spiders. Their appearance, with jaunty little brown cap bordered with black, and their ways

The thought of FIELD SPARROWS always recalls to mind very hot, dry, weedy and bush-covered hillsides or thickets, for in just such places they are always abundant during summer. This species is easily known because of small size, comparatively long tail and rufous markings of head and sides of breast. They are just as easily identified by their fife-like songs, consisting of five or six clear shrill notes of which the first is lower pitched and the last ends in a little descending trill. This song is continued through the hottest days of summer when nearly every other species is silent except perhaps Indigo Buntings and Wood Pewees both of which also like extreme warmth.

Field Sparrows make their little fine-grass nests either on the ground or near it in bushes or weeds,—just such places as Song Sparrows also choose. The eggs of the present species are slightly smaller and much less coarsely and profusely spotted, easily identified even though the birds do not appear.

are captivating, but their songs are quite uninteresting—just a rapid, unmusical chippering, which, however, they continue singing throughout the summer months. They are very frequently imposed upon by Cowbirds, and we often find a single egg of that species reposing among the pretty black-specked blue ones of the Chippy.

Handsomest of all the family are WHITE-THROATED SPARROWS, whose pure white throat stands forth like a new bib against the gray of the breast and sides of the head. The crown is handsomely striped with black and white and, to add a bit of color, a spot of yellow is on either side of the forehead. We know this species chiefly as migrants, but many of them remain in suitable localities in the higher portions of our range. During the latter part of April, we may find them on the ground or among underbrush in open woods, in parks or even about shrubbery in our gardens. White-throated Sparrows have very pleasing and unusual songs—a series of five or six clear, piping, high-pitched whistles, of which the first is the lowest.

A common species that is often overlooked is the GRASSHOPPER SPARROW. He is a queer little chap with short tail and plump, quail-like form, but the strangest thing about him is his song, which is very insect-like in

GOLDFINCHES are so well known and the name applies so well to their golden color that it would seem very unnecessary to apply any other to them, yet we often hear them spoken of as "Wild Canaries" because of their excellent and canary-like song, and as "Thistle Birds" because they are so often found swaying on thistle heads. Besides their full song they utter a great number of very musical notes. While feeding, one often calls to another "sweet, sweet" or "dearie, dearie." Their flight is very peculiar as their wings on the recovery of the stroke are moved so slowly that the body falls a foot or more between beats. They progress by a series of bounds, punctuating each dip with a cheerily called "per-chic-oree."

Goldfinches nest late, in July or August, making a firm cup-shaped structure of fibres, placed in upright forks, usually of alders. The eggs are unmarked bluish-white.

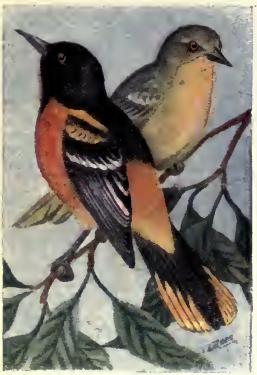
character. These birds frequent dry fields in the middle of which they locate their arched nests. They are quite shy, but if one is armed with a good pair of bird glasses he can get many opportunities of studying them as they sing their wheezy songs from the vantage point of a stone wall. In the same fields we also find the common VESPER SPARROWS, which can always be recognized by the white outer tail feathers. These birds have a lively and attractive song, combining parts of those of Field and Song Sparrows.

During the winter and early spring, we may find associated with flocks of our Goldfinches, two other kinds of finches, Pine Siskins and Redpolls. PINE SISKINS are very closely related to Goldfinches, but are far from being as attractively gowned when in their summer plumage. The Siskin plumage is constant at all seasons—a striped blackish and buffy, the only conspicuous markings being a yellow patch at the base of the primaries and yellow bases to the tail feathers. The markings, however, very rarely can be seen on the bird while it is feeding in trees above us. Their call notes and songs are quite similar to those of the Goldfinch. REDPOLLS are most frequently seen feeding upon weed seeds upon the ground or close to it. Their plumage is very light colored and striped; they have

RED CROSSBILLS are erratic wanderers. In most places we can only regard them as uncertain winter or spring visitors, yet they do occasionally breed on some of our mountains. Of course the most interesting feature of these birds is the curious twisted and crossed bill. Did it occur on but a single specimen, it would be regarded as a freak and the bill would handicap the bird for procuring food. But when such apparent deformity occurs on all of a species, it is evident that in some way it is of more use to them than one of ordinary shape. When we see the ease and quickness with which they can scale the seeds from a pine cone, the use is plain. It is a tool especially made for this purpose, for the food of these birds is composed almost wholly of cone seeds. Consequently they are rarely seen except in the immediate vicinity of coniferous woods or trees. They have a rather sweet but soft song, although the notes we usually hear are clinking whistles as the flocks fly from one feeding ground to another, an infallable mark of recognition in the little crimson cap on the crown. A delicate pale rosy tint often washes over the breast of male birds, making their plumage very beautiful.

PURPLE FINCHES are resident birds with us, but during the winter most of them retire to the fastness of dense coniferous woods or swamps, so that we see comparatively few of them at that season. Old males are handsomely tinged all over with more or less bright crimson, but young males and females are streaked, sparrow-like birds which, however, may be easily recognized by their stout bills, light line over the eye and their musical questioning call notes. The males warble sweetly, and were formerly trapped and caged because of their beauty and song, until the practice was wisely stopped by law. In late spring they separate into pairs and select their nesting sites, which usually are in coniferous trees.

GRACKLES, commonly known as Blackbirds or Crow Blackbirds, return to us early in spring, from their winter sojourn in southern states. They are nearly always to be seen in flocks, and always seem to have matters of great importance to discuss, if we may judge by their actions and voices. Their creakings, croakings and many reedy



BALTIMORE ORIOLES, "Golden Robins" or "Flame-birds," as they are sometimes called, are named not after the city of that name but in honor of Lord Baltimore whose livery was orange and black.

They arrive soon after May 1st, just as cherry trees are in full bloom and spend the first few weeks in gay revelry and song. The duller plumaged females come a few days later and within a short time partners have been selected and nesting sites chosen. The nest of this species is quite a remarkable creation for a bird to make,—a long purse-shaped affair, five to eight inches in length, suspended by the rim from the outer branches of trees,—usually tall ones and particularly elms. It is made of gray fibres, grasses, string, etc. and is so firmly attached to its support that the old nests may be seen for two or three years afterwards, although the same one is never used twice. The eggs are dull bluish-white with black scrawls chiefly about the large end.

notes are not unmusical when given in concert by a number of individuals. At nesting time they split up into smaller parties and repair to coniferous groves, in the branches of which trees they build their bulky nests of sticks and twigs. Grackles are beautiful birds—black, with an iridescent sheen of purple, blue, green and brass, but still they are rather undesirable bird citizens, for they have the pernicious habit of robbing nests of small birds.

To those accustomed to think of Orioles as brilliantly plumaged, orange-colored birds, it comes as a distinct surprise when the chestnut and black ORCHARD ORIOLE is first seen. This species is abundant in southern states, but is only local in our range, reaching its northern limits in southern New England and central New York. Not only is the adult male remarkable in plumage, but males of the second year are quite unique in that they resemble the dull yellowish female, but have a black face and throat patch. They are much shyer than Baltimore Orioles and like to keep concealed within the foliage of the low trees and bushes that they frequent. Their song is a rapid and varied warbling, sounding something like that of Purple Finches. Their nest is a round basket, only partially suspended by the brim, woven of stiff green grasses that

Early in March, RED-WINGED BLACKBIRDS return and for several weeks roam about in flocks rather aimlessly, feeding upon seeds and grain,—the remnant of last years crops. These early flocks are composed almost wholly of male birds; the females arrive a week or so later and then all repair to the marshy, swampy land that constitutes their real home.

The male Red-wings are sometimes locally known as "Soldier Birds" on account of the handsome scarlet and buff epaulets on their shoulders. They are so much more conspicuous than their striped mates that the latter are seldom noticed unless one visits their haunts during the nesting season, when all gather around and "tchack" vehemently, the males also uttering a rasping "tzeer." Their nests are woven baskets of grass suspended from forks of bushes, usually over water. Sometimes, too, they are located in tufts of grass on the ground. The males, in times of peace, utter a pleasing liquid "cong-quer-ree," spreading the wings and tail while singing it.

retain their color for a long time.

Among the dwellers of our fields and meadows, none are more conspicuous than MEADOWLARKS. As we cross their retreats, they take wing with a sputtering alarm note and fly off with alternate flappings and sailings, showing the white outer tail feathers, which form an important field mark. Seen back to, they are very inconspicuous, but when they face us, their bright yellow breasts with prominent V black markings show plainly for a long distance. Their song is a very pleasing one of fife-like whistles and a varying intonation and accent. The words "Spring o' the Y-e-a-r" fit to it very nicely. They often let us get close to them when they are on the ground, but when on trees or posts they are very shy. They are strong walkers, cover much ground while feeding and must be of great benefit to agriculturists, as their food during most of the year is chiefly insectivorious. Some of them remain with us through the winter, but the majority go south.

COWBIRDS are parisites. They are our only species of birds which do not make nests of their own, their eggs being laid singly in the nests of smaller birds and the hatching and care of the young being left to the mercies

A debonair appearance and fine clothes often cover or condone a multitude of sins. Such at least is the case with our well known BLUE JAYS. Everyone knows that they are destructive rascals but yet hesitates to recommend their destruction. When, however, we actually see them sneak up to the nest of a small bird and carry off one of the young or devour some of the eggs, it is hard to forgive even such a handsome and amusing bird.

The vocal organs of Jays are capable of producing almost any kind of sounds,—whistles of all sorts, high or low, screams of hawks, mewing of cats, low confused muttering notes, etc. When excited, however, they always fall back on the familiar harsh screaming "jay, jay."

Anything edible is food for them whether it be berries, fruits, insects or flesh. They have a mania for hiding things, either extra food or any object that attracts their fancy. They breed most commonly in young coniferous trees.

of the foster parents. These young Cowbirds are so large and require so much food that the rightful occupants of the nest sometimes are suffocated. Were it not for these pernicious traits, Cowbirds would be economically very useful, for they destroy quantities of injurious insects. The female is a uniform dull gray, but the male is a handsome bird, with coffee-colored head and glossy black body.

The BOBOLINK is the Dr. Jekyll and Mr. Hyde of the bird world. In spring and summer the male is clothed in black and handsomely marked with white and buff on the head and back. He is also one of the jolliest of birds, singing his tinkling, rippling, bubbling song from the tree tops, from fence posts, tall weeds or blades of grass, or rising, lark-fashion, and singing as he descends to earth on set wings. In fall, he changes his dress to a sparrow-like one, just like that of his mate; no more is the lively, entrancing song to be heard, only a sharp metallic "chink" as a call note or sound of alarm. They gather into large flocks and move southward and are then known in the Chesapeake Bay region only as "Reed-birds", thousands of them being shot and sold in markets and served in restaurants under that name. Farther south, along the South Atlantic and Gulf coasts, they are known as "Rice-birds," for they

WOOD PEEWEES are tardy in their spring arrival, not usually reaching here until after May 10th. They love extreme warmth and so do not take the chances that earlier birds do of arriving during a cold spell. They are abundant until September in dry woods and also found to some extent in orchard and shade trees. They sing very freely until the middle of July, during very warm weather their song being about the only one to be heard in the woods. All day long they call to one another with a sad, plaintive "pee-an-wee," or less often shortened to two syllables, "pee-wee."

Pewees saddle their nests on horizontal limbs of trees, usually quite high up. They are very decorative and resembles knots or little tufts of lichens on the limbs,—composed of plant fibres and down, ornamented on the exterior with bits of green and gray lichens. The eggs are as handsome as the nest, —bright cream-color with a ring of chestnut spots around the large end.

do great damage to the rice crops; men are hired and stationed in all rice fields to try and slaughter them. Thus the bird that we in the north regard so highly is in other places thought of only as an article of food, and in still other localities only as a pest that must be destroyed.

Flycatchers have neither beauty of plumage nor musical voices, yet they are among our most interesting and useful birds. Our smallest species, the LEAST FLYCATCHER or CHEBEC is one of our most abundant and most sociable birds. In summer we can always see or hear them in our shade or orchard trees as well as in young woods. Their song, if it is entitled to be called such, is a brusque, energetic "che-bec! che-bec!" repeated sometimes almost incessantly, with only short pauses between. As each syllable is accompanied by a jerk of the head and tail, it would seem as though so much effort ought to be rewarded by a more musical sound, but theirs seems satisfactory to them, if not to us. At times, especially when his mate is sitting upon eggs in the little fibre nest that is snugly tucked into a crotch, he will dart out and seize a passing insect, fly down with a most pleasing little trill and give the tid-bit to her.

The PHOEBE also has a brusque song of two or three

KINGBIRDS belong to that genus known as Tyrant Flycatchers because of their bold and aggressive manners. They are very tolerant towards smaller and weaker birds but they are the terrors of crows, hawks and jays. If a bird of prey comes into sight the valiant warrior goes forth to meet him, uttering his shrill notes of defiance. Hawks or crows always turn and flee with the Kingbird dashing down from above and pecking them on back and head. When an enemy has been driven far off, the victor returns to his lookout perch exultantly shrilling his achievement.

Their food is wholly insectivorous and is snapped up on the wing by short dashes from their perches or sometimes caught by hovering over the grass. Some owners of apiaries claim that they take their bees while others say they are not destructive as they take only drones. At any rate they are very useful birds for the agriculturalist. Their nests of straw, fibres, grass, etc., are placed in orchard or other trees.

notes, which he frequently utters as he swings on the dead outer branches that serve him as a lookout post. Long ago Phoebes nested only in crevices of ledges or under overhanging banks; they do now sometimes, but since man came and constructed bridges over the streams, barns and sheds, they have found that very cozy places for their homes are to be found on the stringers under the bridge planks and on rafters in or under the outbuildings. The nests are made of mud and moss, and are warmly lined with feathers. The birds are apparently mated for life and return to the same nesting site year after year.

CRESTED FLYCATCHERS, which are of local but regular occurrence here during summer, are very abundant in southern states. They are not in reality crested, but the feathers on the crown are slightly lengthened, as indeed are those of most other species, and are often erected to express emotion. The call note of the Great-crest is a single clear whistle with a rising inflection; his song is a series of clear whistles and is often varied. They are very active birds, continually chasing one another or other species of birds about the treetops. It is a peculiar fact that nearly all their nests, which are located in cavities of trees,

RUBY-THROATED HUMMINGBIRDS are our tiniest birds,—little winged gems with a body scarcely as big as the thumb nail. In some lights the throat of the male appears to be black but when we get the proper view it glows with fiery brilliance. Besides lacking any color on the throat, the female has a rounded tip to the tail while that of her mate is forked.

Hummingbirds do not, as so generally believed, live upon honey or nectar of flowers; to be sure they often drink it, but their food is tiny insects which they catch in the air and within the depths of flowers.

Their nests are exquisite creations of plant down, especially that from fern stems, covered externally with lichens, and saddled on the limb of any kind of a tree at any height, either in woods, orchards or dooryards. The two white eggs are about the size and shape of white beans.

Hummingbirds have a fiery temper out of proportion to their size and will dash at an intruder with a fierceness that always makes him dodge.

contain pieces of cast-off snakeskin wound about the outer edge. Their eggs are also peculiar—cream-colored, curiously scratched with brown in a pattern very different from that of birds of any other genus.

CHIMNEY SWIFTS are birds of exceptional interest. Formerly nesting in hollow trees or caves, they have in the east abandoned the habits of their ancestors and live almost exclusively in unused chimneys on dwellings or factories. The birds are of a sooty color, well matching chimney interiors, and their tail feathers terminate in sharp barbs that are of the greatest assistance in enabling them to cling to the upright surfaces. Their toe nails are quite strong, but their feet are small and weak and wholly unfitted for perching, for which reason they probably never alight in trees. Their wings are very long and narrow—worked by powerful muscles that enable them to keep a-wing all day without tiring.

Their nests are made of small twigs cemented with glutinous saliva of the birds to the insides of chimney walls. Often several pairs nest in the same chimney and the voices of the young birds clamoring as they are being fed can often be heard within the walls. While I have never seen

WHIP-POOR-WILLS are known by sound by nearly everyone who lives or has spent a few summer nights in rural districts, but comparatively few know the birds by sight. Observe that the tail is rounded, with white on the ends of the outer feathers and that the primaries or long wing feathers are barred. The birds commonly seen flying about over cities or pastures about dusk are Nighthawks. They have forked tails and a white band across the middle of the tail and wing feathers. Their note is a nasal "peent" while that of the Whip-poor-will is a rapidly whistled, many times repeated repetition of their name, with the accent on the last syllable.

Their food consists entirely of insects which they catch in their cavernous mouths, sometimes even the largest of moths. They lay their two mottled eggs among the dead leaves in open woods. They are never abroad during daylight unless disturbed from their roosting places which may be on logs, limbs or on the ground.

these Swifts alight in trees, I have several times seen them alight on the ground to take dust baths. Their only notes are a rapid chippering as they wheel about through the sky.

NIGHTHAWKS are hawks only in the sense that they "hawk" through the air after moths and other winged insects. They are often confused with Whip-poor-wills which birds are more nocturnal and are rarely seen at any time, although their voices may often be heard. The present species can very readily be recognized though, even at a long distance, for the throat is white, the wings have a band of white across the outer feathers and the slightly forked tail also has a band of white near the end.

Nighthawks may be seen almost any summer day towards dusk coursing over meadows or sweeping over cities gathering their insect food. They are very graceful in flight, as might be expected of birds having such long, narrow wings— now sweeping downward in a long curve, then soaring to the heights again. Occasionally one will dive down almost perpendicularly from a great elevation, the air passing through his wing feathers, when he checks the mad rush to turn upwards, making a strange, dull booming sound. Daytime, unless it be cloudy weather, when they

FLICKERS are the largest of our common woodpeckers and are exceeded in size only by the rather rare crested species known as the Pileated. The present birds are unusual in that they are so often found on the ground in fields and pastures. They like ants and it is while satisfying their craving for these delicacies that we start them up so often. They may easily be recognized by the white rump patch which shows so plainly as they go away in their undulatory flight. To enable them to easily secure the food they like best, the tips of their tongues are sticky enough so that the ants will adhere. Their notes consist of a single sharp piercing whistle, a rapid and long-continued series of whistles on the same pitch and another that sounds like "wick-up, wick-up," this last being the love song and often accompanied by grotesque bowing on the part of the performers. They nest in holes of trees laying ordinarily six or seven pure white glossy eggs.

are sometimes a-wing, they spend sleeping lengthwise of the branch of a tree, on fence rails, flat stones in pastures or often on gravel roofs of city buildings. They sometimes lay their two stone-colored eggs in the latter situations as well as on the ground in sandy or rocky places.

Woodpeckers are climbers; their toes are arranged two in front and two behind so as to firmly grip the bark, and their tail feathers are pointed and stiffened to act as props to hold them against the sides of trees. RED-HEADED WOODPECKERS are handsome species abundant in the southern states and of local occurrence in New York and and southern New England. The large areas of solid color make them very conspicuous either when in flight or while perching. The entire head is bright crimson, the rump, under parts and middle of wings white, sharply defined against the glossy black back, wings and tail. They frequent orchard and shade trees to some extent, but are most abundant in old swamps containing many dead trees. The diet of this species is quite varied for a woodpecker and consists of insects, which he gets by boring or sometimes catches in the air, various nuts, fruits and berries, and too often eggs and young of other smaller birds. They are quite noisy, especially during spring, making a loud, disagreeable whining noise.

DOWNY WOODPECKERS are the most abundant of our woodpeckers and are resident throughout the year. They have a larger relative in the Hairy Woodpecker from which they can be distinguished not only by their smaller size but because the outer tail feathers of the present species have a few black spots while those of the larger bird are pure white.

Downies are sociable, especially in winter, when they often hunt over the trees in our dooryards and visit lunch counters that kind people keep well stocked with suet and nuts. In summer, they take up their abodes in orchards, young woods or trees along roadsides. Their nesting sites are usually excavated by themselves and the entrance hole is a very small one, appearing much too small for the birds, although they can pass in easily. If they are not disturbed during the breeding, they will continue to use the same nest for several years. Their four or five eggs are white, as are those of all species of woodpeckers.

Handsomely plumaged SAPSUCKERS are sometimes abundant during migrations, and a few nest in some of our mountains. The males can easily be recognized, since the crown and the throat are crimson, each bordered with black; the female is similar, but the throat is white. Instead of having the usual hard-tipped woodpecker tongue, adapted to spearing insects and drawing them from their retreats, the tip of that of this species is rather brushy in character and is adapted to lap up sap that oozes from numerous perforations that they make through the inner bark of trees for that purpose. On the whole, Sapsuckers must be regarded as rather destructive birds, although they make up for the loss they occasion by eating many insects at certain seasons. Their call note is a harsh scream, and is uttered very frequently during spring.

HAIRY WOODPECKERS are larger, but almost identical in plumage to Downy Woodpeckers, the most noticeable difference being in the fact that the outer tail feathers of this species are pure white while those of the Downy have a few black spots. The Hairy is more shy than the Downy and is not nearly as abundant. They frequent larger growth woods and rarely come about dwellings, as the smaller species do. They remain with us all winter and

BELTED KINGFISHERS are, as one would judge from their name, expert fisher birds. They come north in March, —just as soon as ponds or lakes show open water. As we walk along the shores, we may startle them from, or see them perched on their lookout perches,—points of vantage from which they are able to slant down headfirst and plunge after any small fish that is swimming near the surface. If the quarry is too far away for a direct plunge, they hover over the spot a few moments before making the dive that usually proves fatal to the fish. Fish are seized in the opened mandibles and carried to their perches or to the young, if at that season. The adults devour their prey whole, consequently only small fish can be taken. If allowed about a fish hatchery, they may do considerable damage but the fish they usually catch are of little or no value, certainly not as much as the sight of these creatures. They nest in holes tunnelled in banks not far from the water.

many of them nest in suitable parts of our range, so that they are practically residents.

Our Cuckoos are only very distantly related to the European one and have none of the objectionable habits of the latter bird, which is parasitic like our Cowbird. American Cuckoos do build their own nests, even though they are shabby affairs, and they care for their own young.

YELLOW-BILLED CUCKOOS are a little larger and are less common in our range than the Black-billed variety. This species can easily be identified when seen, since the lower mandible is yellowish, the long wing feathers are rufous at their bases and the outer tail feathers are black, with broad white tips. Cuckoos are rather indolent in their movements, moving about comparatively little and then only slyly slipping from the protection of one leafy bower to another. Judging from their actions one might suppose them to be criminals—fugitives whose only safety depended upon concealment. These actions, together with their croaking notes cause them to be regarded with suspicion or superstition by many ignorant people, whereas they are among our most beneficial birds, they being one of the few species to feed extensively upon the destructive tent caterpillars.

BLACK-BILLED CUCKOOS, our most abundant species, can easily be distinguished from Yellow-billed ones since both mandibles are black, there is a prominent red eye ring and the tail feathers are all uniform in color, the outer ones being very narrowly tipped with white.

Cuckoos have four toes two of which are in front and two behind; the object of this arrangement is not apparent for, so far as we know, their habits of living are not such as to derive any special benefit from such an arrangement. They are valuable birds, since their food is wholly insectivorous including such destructive species as tent caterpillars which few other birds will devour. Their notes are all guttural and croaking in character; hence the ill-favor with which many persons regard them, without reason. Their nests are rude platforms of twigs, lined with a few catkins, placed low down in thickets or briers.

Their nests are shabby platforms of twigs and catkins, placed in thickets or the lower branches of trees. The dull blue eggs are a trifle larger and lighter colored than those of the Black-billed Cuckoo.

Most of our Owls are night birds, not because they cannot see during daylight, for many of them can see just as well in bright light as any other kind of bird, but because after dark hunting conditions are more favorable to securing the food they desire. With few exceptions Owls are valuable birds, feeding extensively upon moles, meadow mice and other destructive rodents which only come from their retreats after dark. However, our largest species, GREAT HORNED OWLS, do not come under this class of useful birds. They and those rare winter visitors, Snowy Owls, are our only species which can be classed as destructive. They are large and very powerful, capable of and frequently carrying away full grown fowls, grouse, rabbits and other creatures not exceeding these in size. Because of the cutting away of much of the heavy timber in which these birds live, they are yearly becoming more rare within our limits. Horned Owls are frequently seen abroad during daylight and are apparently not at all bothered by bright light. They nest either in cavities of large trees or lay their eggs in old crow or hawk nests. Their most common

Of all the owls, none are so useful, none so abundant and none so sociable as SCREECH OWLS. They live in trees in woods, in our orchards, in barns and even in large cities provided that suitable trees with cavities are at hand. They are rarely abroad during daylight, passing that time dozing in the concealment of hollow limbs or nooks in barns. At dusk, they come from their hiding places and make the rounds of the neighborhood hunting mice which form almost their whole food.

Their voices are tremulous and wailing but not displeasing and certainly a long way from screeching as one might be led to believe, according to the name. Some Screech Owls are gray and some are reddish, the differences being merely color phases and independent of age or sex; the gray ones are the most commonly found.

As usual with owls, their food is swallowed whole and the indigestible portions later ejected as "pellets."

note is a dismal, deep-toned "Hoo-hoo-hoo"; again the woods may ring with a wild, demoniacal scream entirely different from what you would expect from any bird.

BARRED OWLS are the largest of the so-called earless owls, that is ones without elongated tufts of feathers on the head. Although quite abundant, they are not seen often unless routed out of their hiding places by crows, for they are quite nocturnal in their habits. They very rarely capture poultry or game birds, confining their diet chiefly to rodents. Nearly all food is devoured entirely and later the indigestible portions, such as bones, feathers or fur, are ejected in the form of pellets.

Smallest of our Owls, and also an earless species, is the SAW-WHET or ACADIAN OWL. These are chiefly winter visitors, although some of them nest in our mountains. They usually spend the day sleeping at low elevations in trees or bushes; if discovered they can usually be caught in the hands. Their staple food is insects and small rodents, but of necessity they sometimes have to catch small birds during the winter.

LONG-EARED and SHORT-EARED OWLS are two species of a size midway between that of the Screech and Barred Owls. The first has long ear tufts, the plumage has much brown and the under parts are barred; the second

OSPREYS are very large birds often incorrectly called "Sea Eagles" and very frequently mistaken for real eagles, which birds, however, are never white on the under parts in any plumage.

Ospreys sail majestically along the courses of streams or over bays, at an elevation of a hundred feet or so, their keen yellow eyes searching the waters beneath. If a fish is spied near the surface the fisher bird hovers on beating wings until the quarry is in just the right position, then folds them to his sides and drops like a plummet, head-first. Just above water, the long legs are extended in front before his face and with a mighty plunge he disappears from view; in a few seconds he reappears holding a struggling victim in his talons; a vigorous shake of the great wings sheds most of the water and he carries the prize away to his nesting or feeding tree. It is a wonderful sight and one that a person never tires of watching. Their nests are bulky structures of sticks on dead trees or sometimes on the ground.

has tiny ear tufts, is of a yellowish buff color and the under parts are marked in streaks. Long-eared Owls nest most often in old crow nests, while the Short-eared species builds on the ground. The latter species does most of its hunting just at dusk about the edges of marshes.

Our Hawks and Eagles vary greatly in size from the diminutive Sparrow Hawk to the gigantic Bald Eagle. With very few exceptions it has been found that they are of economic importance, as they feed almost wholly on rodents and insects.

BALD EAGLES are rare and very locally distributed in our range, chiefly near the coast or about large lakes. These great birds have an expanse of wing between six and seven and a half feet, the year old birds being the largest. For the first three years they are brownish black all over, attaining the white head and tail only when four years old. They feed to some extent upon ducks, rabbits, etc., but the greater part of their food is fish which have been cast up on the shore. They catch some fish from fish weirs and also rob Ospreys of their booty. Taken altogether they can more appropriately be regarded as scavengers than as birds of prey. Their true lives are far different from what many believe after reading lurid accounts

Smallest of our Raptores are the little SPARROW HAWKS,—trim little falcons which reach here early in March. For the first few weeks we notice them only as we see them winging their way with their peculiar flight, a rapid beating of the wings followed by a short sail, over fields. Towards the end of April, while selecting their partners or discussing the selection of nesting sites, they are very noisy, their sharp cries, resembling "killy, killy, killy, etc.," being audible for long distances. They nest in cavities of trees, usually deserted homes of Flickers. The four or five eggs, laid on the bare wood or chips, are cream-colored, speckled and blotched with reddish-brown. The young, like those of all our hawks, are first covered with white down, and remain in the nest three or four weeks before they are able to leave. These birds live wholly upon mice and insects, chiefly grasshoppers. Instances of their capturing small birds are quite rare.

of the prowess of the Eagle. The GOLDEN EAGLE, a western species which sometimes straggles to our eastern mountains, is far more courageous than the eastern bird and rarely devours prey not caught by his own efforts.

Among our useful Hawks may be mentioned the BROAD-WINGED, a bird of medium size, with rather broad, rounded wings, short tail and handsomely barred under parts; the RED-SHOULDERED HAWK, adults of which have the under parts very heavily barred with rufous, the shoulders reddish-brown and the tail and primaries sharply barred with black and white; and the RED-TAILED HAWK, which in adult plumage have the whole tail a bright rufous, with or without a subterminal narrow black band. These three species are quite common in and around the edges of woodland, but rarely will more than one pair of one species be found in the same woods.

Our only habitually destructive species are GOSHAWKS, handsome birds with blue-gray backs and under parts finely waved with black lines, which come from their northern homes to pass the winter here. Their food is of grouse and other game birds, poultry, rabbits, etc. They are so bold at times that they will dash down and carry off a fowl from a flock which the owner is feeding in his yard;

Since the passing of the Passenger Pigeon, MOURNING DOVES are our only representatives of this family. They are of only local occurrence in New York and New England as this is nearly the northern limit of their range in the east.

Their food is chiefly of grain, seeds and berries gathered from the ground, or from bushes or trees. Their flight is very swiftly performed and the long stiff wing feathers make a whistling sound as the birds pass. Well known as they are, many people still mistake them for Wild Pigeons. These are less than fourteen inches long and have a black spot under the ears, while the Passenger Pigeon is more than sixteen inches in length. There are many other differences but these two easily distinguish between the two species.

Doves make very shabby nests,—flat platforms of just a few twigs, with barely hollow enough to hold the two eggs. These nests may be in trees, in bushes, on logs or on the ground.

and SHARP-SHINNED and COOPER'S HAWKS, two rather small species, very similar in plumage, the latter being the larger. These birds are residents and quite destructive to young poultry, small game and other birds.

MARSH HAWKS, that species which we so often see coursing low over meadows or which we so frequently start from the ground, and which can readily be identified by the white rump, are classed as among our beneficial birds of prey. Fortunately our farmers are becoming educated to the value of birds, even of hawks, and are learning to spare the useful kinds instead of, as a few years ago, killing every one that came within reach of their guns.

Ample evidence of the destroying power of man is shown by the case of our PASSENGER PIGEONS, which up to the year 1875 were to be found in flocks containing thousands of individuals throughout eastern North America. They were trapped, shot, netted and even killed with poles until now they are extinct or so near it that there is no hope of their ever regaining a foothold. Concerted efforts for several years have failed to locate a single breeding pair or any satisfactory evidence of any living Passenger Pigeons.

As Ruffed Grouse are kings of the woods, so BOB WHITES reign in our fields, pastures and small growths.

Every sportsman knows the RUFFED GROUSE during the fall hunting season but comparatively few know them during the rest of the year, when their habits are the most interesting. April is the "drumming" month. The cock grouse are then selecting partners for the season.

Each grouse has his favorite drumming log or rock. Early in the morning he visits it, struts up and down a few times with head back, ruffs extended and tail spread wide over the back; then he looks carefully about him, stands quite erect, with tail horizontal and beats the air with his wings,—first a thump, thump, thump, but gradually increasing in speed and resonance until a vibrating drumming sound results. While doing this he is oblivious to everything but after finishing he listens intently for an answer to his challenge.

Their dozen or more pale brown eggs are laid in a hollow among the dead leaves usually under the protection of a log or against the base of a stump.

They are not nearly so abundant as a few years ago; in fact, in many of their old haunts they are all gone. Cold and rainy weather and the hunter and his dog are about equally to blame for their passing away. In fall they gather in flocks and frequent stubble, feeding upon grain and also upon insects as long as they are available. Our Quail, as they are most often called, are of the greatest value economically, this value far exceeding that of their worth as market or table birds.

In fall and winter they are quite silent, but we sometimes hear a softly repeated call note used to keep the flock from becoming widely separated when feeding and also to call them together after they have become dispersed for any reason. In spring and summer the loud, clearly whistled "Bob-white" or "Bob-bob-white" is one of the sweetest sounds of nature. They nest in the tall grass or weeds bordering fields, or in bush-dotted pasture land. The entrances is often made tunnel-like by arching the grasses over so as to completely conceal the numerous white eggs.

Several Plover and many kinds of Sandpipers pass through during migrations. We will mention but a few of them here, but a complete list is given in the back of this booklet.

None of our shore birds, so called, are better known or more often seen than our SPOTTED SANDPIPER,—often called "Tip-up" or "Teeter-tail" because of their peculiar habit of bowing and bobbing the tail while standing. They are found along the seashore, rivers, about lakes or any of our small ponds. When they wish to reach a point farther along shore, they always make a wide detour out over the water uttering a clear, sweetly whistled "peet-weet" as a good bye to us or a greeting to the friends they are to visit. Their food consists of insects gathered along the edge of the water or in fields or cultivated land. Their nests are composed of but a few dried grasses twisted about a slight depression in the ground, usually under concealment of long grass or clumps of weeds. The nest may or may not be close to the water. The eggs are pear-shaped, of a buffy color, spotted with dark brown. The little, gray, striped downy young leave the nest and run about after their mother as soon as hatched.

SEMIPALMATED PLOVER, or Ringnecks, are commonly found along the seacoast during August and again in May, and less often about the mud flats of some of our lakes and ponds. A single black band across the breast is the field mark of this species. KILDEER are larger than the last species, have two black bands across the breast and a long tail which is rufous at the base. They are very abundant in the Mississippi Valley, rather common in New York state and of local occurrence during the breeding season in New England. They are very noisy during spring and summer, their loud cries of "Kildee, kildee, etc." coming from upland, fields or shores of ponds. Their nests are on the ground under concealment of patches of weeds or tufts of grass.

WOODCOCK are not uncommon as breeding birds, but are, of course, more numerous during migrations when the northern birds are passing through. They come early in spring—just as soon as the ground softens enough for them to secure food. They have very long bills to probe deeply in soft mud for worms; the tips are very flexible and sensitive enable them to feel and grasp prey. The eyes are large so they can see well in the dark and are placed

GREEN HERONS are so commonly seen about our ponds and streams that the country boy is wont to know them by the name "Fly-up-the-creek." As they rise ahead of an approaching person, they usually utter a single distinctive shriek to vent their displeasure at being disturbed or as a warning to their neighbors.

Their food consists of tiny fish, frogs, crustaceans and insects; occasionally, too, one will spear a mouse or mole that becomes venturesome enough to appear during the daytime. They will stand for a long time in shallow water waiting for some creature to come within striking distance. When standing among rushes, they often attempt to avoid detection by standing erect with the bill pointed upward. They resemble their surroundings so perfectly that only the sharpest of eyes would discover them.

Their nests are platforms of sticks and twigs placed in bushes or on the lower branches of trees; they may or may not be located near water. Their four or five eggs are plain greenish-blue.

well back and near the top of the head so they can see about them even when the bill is buried to its base.

Herons are long-legged, long-necked wading birds, whose food consists chiefly of small fish, frogs, shell fish and often meadow mice and insects. They stand rigidly in the water for long periods waiting for some prey to come within striking distance; the heavy, pointed bill, propelled by the long sinuous neck rarely misses the mark, some times catching it between the mandibles and again killing it by a sharp blow.

BLACK-CROWNED NIGHT HERONS feed chiefly after dusk; on almost any summer night we may hear the harsh, rasping "quark" of one as he passes overhead, from pond to pond or carrying food to his youngsters, which are located in a shabby nest of sticks high up in the grove in which the colony is living. These are handsome herons—grayish-white, except for the black crown and back, and with a packet of three very long slender plumes growing from the back of the head. Their eyes are red, while those of our other herons are yellow.

Largest of our herons are GREAT BLUE HERONS, sometimes erroneously called "Cranes". They are about

WOOD DUCKS are generally conceded to be the most beautiful species found in this or any other country. They formerly nested in abundance about our lakes but have been becoming more scarce each year and are now only locally reported as breeding. Hunting them for their beautiful feathers and their flesh has done even more to drive them away than the cutting off of woods.

They nest in hollow trees, preferably a trunk leaning out over the water, but lack of such sites causes them to often nest a hundred yards or more away from the water's edge. The ducklings are hatched covered with brown and buff down and either tumble down from the edge of the hole to the water or are carried down to the ground in the bill of the duck.

They feed upon acorns, insects and berries and also upon tender roots of water plants and shellfish that they get from shallow water by dabbling with the bill or by "tipping up." Their flight is swift and they can thread their way through woods with great ease.

four feet in length, far exceeding that of any other of our species—truly magnificent as they slowly flap their way across the sky or gracefully tread the water's edge. BITTERNS are mottled brown and buff colored species which inhabit bogs, their color making them very inconspicuous when quiet. They are particularly noted for the peculiar "pumping" love song which they utter in spring. Their pale brown eggs are laid in grassy hummocks rising above the water. The eggs of other herons are pale bluish-green.

Of the many species that frequent our waters during migration, Wood Ducks and Black Ducks are the only ones to regularly breed within our range, although Ruddy Ducks, Golden-eyes, Teal, Mallards and Hooded Mergansers casually do.

Several species of Gulls are found along our coast in winter, most common of which are the well known HERRING GULLS, which venture into our harbors and act as scavengers from the water about the docks. Most of the Gulls breed in the far north, but this species nests abundantly on islands off the Maine coast and in northern New York.

Abbreviations—Summer, s.; Winter, w.; Resident, r.; Transient, t.; Visitor, v.; Common, c.; Uncommon, unc.; Abundant, ab.; Accidental, ac.; Irregular, irreg.

A.O.U.No.	Name.	Breeds	Occurs	Arrives
2.	Holboell Grebe. Colymbus holboelli		unc, tv..	Oct....
3.	Horned Grebe. Colymbus auritus		ctv.....	Oct....
6.	Pied-billed Grebe. Podilymbus podiceps..	rarely...	ct.....	Apr. 6.
7.	Loon. Gavia immer	rarely...	ct.....	Apr. 1.
9.	Black-thr. Loon. Gavia arctica		rare, t...	.....
11.	Red-thr. Loon. Gavia stellata		ctv, wv .	.....
13.	Puffin. Fratercula a. arctica		rare, wv	.....
27.	Black Guillemot. Cepphus grylle		ac, wv...	.....
31.	Brunnich Murre. Uria l. lomvia		rare, wv	.....
32.	Razor-billed Auk. Alca torda		rare, wv	.....
34.	Dovekie. Alle alle		unc, wv.	.....
35.	Skua. Megalestris skua		ac, wv...	.....
36.	Pomarine Jaeger. Stercorarius pomarinus.		reg, tv ..	June 1.
37.	Parasitic Jaeger. S. parasiticus		reg, tv ..	June 1.
38.	Long-tailed Jaeger. S. longicaudus		rare, tv.	.....
39.	Ivory Gull. Pagophila alba		ac, wv...	.....
40.	Kittiwake. Rissa t. tridactyla		cwv.....	Nov. 1.
42.	Glaucous Gull. Larus hyperboreus		rare, wv	.....
43.	Iceland Gull. L. leucopterus		rare, wv	.....
45.	Kumlien Gull. L. kumlieni		rare, wv	.....
47.	Great Black-backed Gull. L. marinus		cwv.....	Oct. 1..
51.	Herring Gull. L. argentatus	n. N. Y..	ab, wv..	Sept. 1.
54.	Ring-billed Gull. L. delawarensis		cwv...	Sept. 1.
58.	Laughing Gull. L. atricilla	in Mass.	rare, sr .	.....
60.	Bonaparte Gull. L. philadelphia		ctv, wv .	Sept. 1.
60. 1.	Little Gull. L. minutus		ac, twice	.....
62.	Sabine Gull. Xema sabini		rare, tv.	.....
63.	Gull-billed Tern. Gelochelidon nilotica		ac, sv	.....
64.	Caspian Tern. Sterna caspia		rare, tv.	.....
65.	Royal Tern. S. maxima		ac, once.	.....
67.	Cabot Tern. S. sandvicensis acuflavida		ac, ?.....	.....
68.	Trudeau Tern. S. trudeaui		ac, once.	.....
69.	Forster Tern. S. forsteri		rare, tv.	.....
70.	Common Tern. S. hirundo	c, July 1.	csr.....	May 10
71.	Arctic Tern. S. paradisaea		rare, tv.	.....
72.	Roseate Tern. S. dougalli	rarely...	sr.....	May 10
74.	Least Tern. S. antillarum	in Mass.	rare, sv	.....
75.	Sooty Tern. S. fuscata		ac, once.	.....
77.	Black Tern. Hydrochelidon n. surinamensis		rare, tv.	.....
80.	Black Skimmer. Rynchops nigra		rare, sv.	.....
88.	Cory Shearwater. Puffinus borealis		rare, sv.	.....
89.	Greater Shearwater. P. gravis		reg, sv..	Aug ...
92.	Audubon Shearwater. P. lherminieri		ac, once.	.....
95.	Sooty Shearwater. P. griseus		reg, sv..	Aug ...
98.	Black-capped Petrel. Æstrelata hasitata..		ac, sv....	.....
99.	Scaled Petrel. Æ. scalaris		ac, once.	.....
106.	Leach Petrel. Oceanodroma leucorhoa		rare, tv.	.....
109.	Wilson Petrel. Oceanites oceanicus		ab, sv...	July 1.
112.	Yellow-billed Tropic-bird. Phaethon am		ac, once.	.....
115.	Booby. Sula leucogastra		ac, once.	.....
117.	Gannet. S. bassana		tv, wv...	Oct....
119.	Cormorant. Phalacrocorax carbo		tv.....	Apr ...
120.	Double-crested Cormorant. P. a. auritus...		ctv.....	Apr. 1.
125.	White Pelican. Pelicanus erythrorhynchos.		ac, twice	.....
126.	Brown Pelican. P. occidentalis		ac, once.	.....
128.	Man-o'-war-bird. Fregata aquila		ac, twice	Aug ...
129.	Merganser. Mergus americanus		wv.....	Nov ...
130.	Red-breasted Merganser. M. serrator		ctv, wv .	Oct....
131.	Hooded Merganser. Lophodytes cucullatus.	rarely...	tv, wv, sr	.....
132.	Mallard. Anas platyrhynchos	rarely...	tv.....	.....
133.	Black Duck. A. rubripes	c, May..	ctv, sr...	.....

No.	Name.	Breeds	Occurs	Arrive
135.	Gadwall. Chaulelasmus streperus		rare, tv.	
136.	European Widgeon. Mareca penelope		ac, tv.	
137.	Baldpate. M. americana		ctv	Mar. 1.
138.	European Teal. Nettion crecca		ac, v. 3	
139.	Green-winged Teal. N. carolinensis		unc, tv.	
140.	Blue-winged Teal. Querquedula discors		ctv	
141.	Cinnamon Teal. Q. cyanoptera		ac, tv.	
142.	Shoveller. Spatula clypeata		rare, tv.	
143.	Pintail. Dafila acuta		ab, tv.	
144.	Wood Duck. Aix sponsa	local	tv, sr.	Apr. 1.
145.	Rufous-crested Duck. Netta rufina		ac, once.	
146.	Redhead. Marila americana		ctv	
147.	Canvas-back. M. vallsineria		rare, tv.	
148.	Scaup Duck. M. marila		ab, tv.	
149.	Lesser Scaup Duck. M.m. affinis		ctv, wv.	
150.	Ring-necked Duck. M. collaris		rare, tv.	
151.	Golden-eye. Clangula c. americana		ctv, wv.	Nov. 1.
152.	Barrow Golden-eye. C. islandica		ac, once.	
153.	Buffle-head. Charitonetta albeola		ctv, wv.	
154.	Old-squaw. Harelda hyemalis		ab, wv.	Oct. 1.
155.	Harlequin Duck. Histrionicus histrionicus		rare, wv	
156.	Labrador Duck. Camptorhynchus labrad.		extinct	
160.	Eider. Somateria dresseri		rare, wv	
162.	King Elder. S. spectabilis		reg. wv	Nov. 1
163.	Scoter. Oidemia americana		cwv	Oct. 1.
165.	White-winged Scoter. O. deglandi		ab, wv.	Oct. 1.
166.	Surf Scoter. O. perspicillata		cwv	Oct. 1.
167.	Ruddy Duck. Erismatura jamaicensis		ctv	
169.	Snow Goose. Chen. h. hyperboreus		rare, wv	
169a.	Greater Snow Goose. C. h. nivalis		rare, tv.	
169.1.	Blue Goose. C. caerulescens		rare, tv.	
171a.	White-fronted Goose. Anser a. gambeli		rare, tv.	
172.	Canada Goose. Branta c. canadensis		ctv, wv.	Mar. 1
172a.	Hutchins Goose. B. c. hutchinsi		ac, tv.	
173.a.	Brant. B. bernicla glaucogastra		ctv	Mar. 1
174.	Black Brant. B. nigricans		ac, v.	
175.	Barnacle Goose. B. leucopsis		ac, once.	
180.	Whistling Swan. Olor columbianus		rare, tv.	
181.	Trumpeter Swan. O. buccinator		ac, tv.	
184.	White Ibis. Guara alba		ac, twice	
186.	Glossy Ibis. Plegadis autumnalis		ac, twice	
187.	White-faced Glossy Ibis. P. guarauna		ac, v.	
188.	Wood Ibis. Mycteria americana		ac, once.	
190.	Bittern. Botaurus lentiginosus	c, May 15	csr	Apr. 1
191.	Least Bittern. Ixobrychus exilis	c, June 1	csr	May 1
194.	Great Blue Heron. Ardea h. herodias	local	csr	Apr. 1
196.	Egret. Herodias egretta		rare, sv.	
197.	Snowy Egret. Egretta c. candidissima		rare, sv.	
199.	Louisiana Heron. Hydranassa t. ruficollis		ac, sv.	
200.	Little Blue Heron. Florida caerulea		rare, sv.	
201.	Green Heron. Butorides v. virescens	c, May 20	ab, sr	May 1
202.	Bl'k-cr. Night Heron. Nycticorax n. naevius	c, May 1.	ab, sr.	Apr. 6
203.	Yell.-cr. Night Heron. Nyctanassa violacea		ac, fall.	
204.	Whooping Crane. Grus americana		ac, tv.	
206.	Sandhill Crane. G. mexicana		ac, tv.	
208.	King Rail. Rallus elegans	May 30.	local, sr.	
211.	Clapper Rail. R. c. crepitans	May 30.	csr	Apr. 1
212.	Virginia Rail. R. virginianus	May 15.	csr	Apr. 1
214.	Sora. Porzana carolina	c, May 30	csr	Apr. 2
215.	Yellow Rail. Coturnicops noveboracensis		rare, tv.	Apr. 3
216.	Black Rail. Creciscus jamaicensis		rare, tv.	May 1
217.	Corn Crake. Crex crex		ac, 3.	
218.	Purple Gallinule. Ionornis martinicus		ac, sv	
219.	Florida Gallinule. Gallinula galeata	May 20.	local, sr.	May 1
221.	Coot. Fulica americana	local	ctv, sr.	Apr. 2
222.	Red Phalarope. Phalaropus fullcarius		tv, coast	
223.	Northern Phalarope. Lobipes lobatus		ctv	May 1

No.	Name.	Breeds	Occurs	Arrives
224.	Wilson Phalarope. Steganopus tricolor....	.....	rare, tv.	.....
225.	Avocet. Recurvirostra americana.....	.....	ac, fall..	.....
226.	Black-necked Stilt. Himantopus mexicanus	.....	ac, fall..	.....
228.	Woodcock. Philohela minor.....	c, Apr. 20	csr	Mar. 10
230.	Wilson Snipe. Gallinago delicata.....	rarely...	ctv	Apr. 10
231.	Dowitcher. Macrorhamphus g. griseus....	.....	ctv	May 1.
231a.	Long-billed Dowitcher. M. g. scolopaceus.	.....	tv	May 1.
233.	Stilt Sandpiper. Micropalama himantopus.	.....	tv	May 15
234.	Knot. Tringa canutus.....	.....	ab, tv...	May 15
235.	Purple Sandpiper. Arquatella m. maritima	.....	rare, wv	.....
239.	Pectoral Sandpiper. Pisobia maculata.....	.....	ctv	May 10
240.	White-rumped Sandpiper. P. fuscicollis...	.....	ctv	.....
241.	Baird Sandpiper. P. bairdi.....	.....	ctv	.....
242.	Least Sandpiper. P. minutilla.....	.....	ab, tv...	May 8.
243.	Dunlin. Pelidna a. alpina.....	.....	ac, once.	.....
243a.	Red-backed Sandpiper. P. a. sakhalina....	.....	ctv.....	May 1
244.	Curlew Sandpiper. Erolia ferruginea.....	.....	ac	.....
246.	Semipalmated Sand. Ereunetes pusillus...	.....	ab, tv...	May 1.
247.	Western Sandpiper. E. mauri.....	.....	rare, tv.	.....
248.	Sanderling. Calidris leucophaea.....	.....	ab, tv...	Apr. 1.
249.	Marbled Godwit. Limosa fedoa.....	.....	rare, tv.	.....
251.	Hudsonian Godwit. L. haemastica.....	.....	rare, tv.	Sept. 9.
254.	Greater Yellow-legs. Totanus melanoleucus	.....	ctv	Apr. 1.
255.	Yellow-legs. T. flavipes.....	.....	ctv, fall.	.....
256.	Solitary Sandpiper. Helodromas solitarius.	.....	ctv	May 10
258.	Willet. Catoptrophorus s. semipalmatus..	.....	v, fall...	Sept. 1.
260.	Ruff. Machetes pugnax.....	.....	ac	.....
261.	Upland Plover. Bartramia longicauda.....	May 20..	local	Apr. 20
262.	Buff-breasted Sandpiper. T. subruficollis...	.....	rare, tv.	.....
263.	Spotted Sandpiper. Actitis macularia.....	c, May 20	csr	Apr. 20
264.	Long-billed Curlew. Numenius americanus.	.....	rare, tv.	.....
265.	Hudsonian Curlew. N. hudsonicus.....	.....	tv, fall..	Sept...
266.	Eskimo Curlew. N. borealis.....	.....	rare, tv.	.....
269.	Lapwing. Vanellus vanellus.....	.....	ac	.....
270.	Black-bellied Plover. Squatarola squatarola	.....	ctv, fall.	.....
272.	Golden Plover. Charadrius d. dominicus...	.....	ctv, fall.	Aug. 20
273.	Killdeer. Oxyechus vociferus.....	.....	csr	Mar. 15
274.	Semipalmated Plov. Ægialitis semipalmata	.....	ab, tv...	May 1.
277.	Piping Plover. Æ. meloda.....	June 10..	sr.....	Apr. 1.
280.	Wilson Plover. Octhodromus wilsonius.....	.....	ac, sv ...	.....
283a.	Ruddy Turnstone. Arenaria i. morinella..	.....	ctv	May 10
286.	Oyster-catcher. Haematopus palliatus.....	.....	ac, sv....	.....
289.	Bob-White. Colinus v. virginianus.....	c, May 20	cr.	.....
298c.	Spruce Partridge. Canachites c. canace....	local ...	r,n, N.Y.	.....
300.	Ruffed Grouse. Bonasa u. umbellus.....	c, May 1.	cr.....	.....
301.	Willow Ptarmigan. Lagopus l. lagopus....	.....	ac, wv...	.....
306.	Heath Hen. Tympanuchus cupido.....	.....	formerly	.....
310a	Wild Turkey. Meleagris g. silvestris.....	formerly	formerly	.....
***	Pheasant. Phasianus torquatus.....	intro....	intro.....	.....
315.	Passenger Pigeon. Ectopistes migratorius.	formerly	ctv,form	.....
316.	Mourning Dove. Zenaidura m. carolinensis	c, Apr. 25	csr	Mar. 20
320.	Ground Dove. Chaemepelia p. terrestris....	.....	ac, sv	.....
325.	Turkey Vulture. Cathartes septentrionalis.	.....	rare, sv..	.....
326.	Black Vulture. Catharista urubu.....	.....	ac, sv	.....
327.	Swallow-tailed Kite. Elanoides forficatus.	.....	ac, sv....	.....
331.	Marsh Hawk. Circus hudsonius.....	c, May 10	csr	Apr. 1.
332.	Sharp-shinned Hawk. Accipiter velox.....	c, May 10	ctv. sr...	.....
333.	Cooper Hawk. A. cooperi.....	c, May 10	ctv,sr.wr	.....
334.	Goshawk. Astur. a. atricapillus.....	.....	wv	Oct. 10.
337.	Red-tailed Hawk. Buteo b. borealis.....	c, Apr. 1.	cr.....	.....
339.	Red-shouldered Hawk. B. l. lineatus.....	c, Apr. 25	cr.....	.....
342.	Swainson Hawk. B. swainsoni.....	.....	ac. v.....	.....
343.	Broad-winged Hawk. B. platypterus.....	c, May 20	ctv, sr...	Mar. 20
347a.	Rough-legged Hawk. Archib. l. s.-johannis	.....	wv.....	Nov....
349.	Golden Eagle. Aquila chrysaetos.....	.....	ac, v.....	.....
352.	Bald Eagle. Haliaetus l. leucocephalus....	local	tv, sr....	.....
353.	White Gyrfalcon. Falco islandus.....	.....	ac, v.....	.....

No.	Name.	Breeds	Occurs	Arrives
354a.	Gyrfalcon, F. rusticolus gyrfalco	.....	ac, wv	.....
354b.	Black Gyrfalcon, F. r. obsoletus	.....	ac, wv	.....
356a.	Duck Hawk, F. peregrinus anatum	local	unc, sr	.....
357.	Pigeon Hawk, F. c. columbarius	local	ctv, sr	.....
360.	Sparrow Hawk, F. s. sparverius	c, May 15	ctv, sr	Mar. 1.
364.	Osprey, Pandion haliaetus carolinensis	c, May 10	ctv, sr	Apr. 15
365.	Barn Owl, Aluco pratincola	local	local, sr	.....
366.	Long-eared Owl, Asio wilsonianus	c, May 15	cr	.....
367.	Short-eared Owl, A. flammeus	local	wv, sr	.....
368.	Barred Owl, Strix v. varia	c, Mar. 20	cr	.....
370.	Great Gray Owl, Scotiaptes n. nebulosa	.....	ac, wv	.....
371.	Richardson Owl, Cryptoglaux f. richardsoni	.....	ac, wv	.....
372.	Saw-whet Owl, C. a. acadica	local	wv, sr	.....
373.	Screech Owl, Otus a. asio	c, May 10	cr	.....
375.	Great Horned Owl, Bubo v. virginianus	c, Mar. 1	cr	.....
376.	Snowy Owl, Nyctea nyctea	.....	rare, wv	.....
377a.	Hawk Owl, Surnia ulula caparoch	.....	rare, wv	.....
378.	Burrowing Owl, Speotyto c. hypogaea	.....	ac	.....
387.	Yellow-billed Cuckoo, Coccyzus a. am	c, May 30	csr	May 5..
388.	Black-billed Cuckoo, C. erythrophthalmus	c, May 25	csr	May 1.
390.	Belted Kingfisher, Ceryle alcyon	ab, May 1	ab, sr	Mar. 30
393.	Hairy Woodpecker, Dryobates v. villosus	c, May 20	cr	.....
394c.	Downy Woodpecker, D. pubescens med	ab, May 20	ab, r	.....
400.	Arctic 3-toed Woodpecker, Picoides arcticus	rare	rare, wv	.....
401.	Three-toed Woodpecker, P. a. americanus	.....	rare, wv	.....
402.	Yell-bell. Sapsucker, Sphyrapicus varius	local	ctv, sr	.....
405a.	Pileated Wood. Phloeotomus p. abieticola	local	rare, r	.....
406.	Red-headed Wood. Melanerpes erythroceph	c, May 15	csr	May 1.
409.	Red-bellied Woodpecker, Centurus carolinus	.....	rare, sv	.. ..
412.	Northern Flicker, Colaptes a. lutens	ab, May10	ab, r	.....
417.	Whip-poor-will, Antrostomus v. vociferus	c, June 1	csr	May 1.
420.	Nighthawk, Chordeiles v. virginianus	ab, June1	ab, sr	May 5.
423.	Chimney Swift, Chaetura pelagica	ab, May25	ab, sr	Apr. 25
428.	Ruby-thr. Hummingbird, Archilochus colubris	c, May 15	csr	May 1.
444.	Kingbird, Tyrannus tyrannus	ab, May25	ab, sr	May 1.
445.	Gray Kingbird, T. dominicensis	.....	ac	.....
447.	Arkansas Kingbird, T. verticalis	.....	ac	.....
452.	Crested Flycatcher, Myiarchus crinitus	c, June 1.	csr	May 5.
456.	Phoebe, Sayornis phoebe	ab, May 1	ab, sr	Mar. 20
459.	Olive-sided Flycatcher, Nuttallornis borealis	.....	tv	May 20
461.	Wood Pewee, Myiochanes virens	ab, June1	ab, sr	May 10
463.	Yell-bell. Flycatcher, Empidonax flaviventris	local	ctv, sr	May 10
465.	Acadian Flycatcher, E. virescens	c, May 25	csr	May 10
466a.	Alder Flycatcher, E. trailli alnorum	local	tv, sr	May 20
467.	Least Flycatcher, E. minimus	ab, May20	ab, sr	May 1.
473.	Skylark, Alauda arvensis	intro, L.I	intro	.....
474.	Horned Lark, Otocoris a. alpestris	.....	cwv	Nov....
474b	Prairie Horned Lark, O. a. praticola	c, w, N. Y	tv, sr	.....
477.	Blue Jay; Cyanocitta c. cristata	ab, May15	ab, r	.....
484.	Canada Jay, Perisoreus c. canadensis	o, n, N. Y	r, n, N. Y	.....
486a.	Northern Raven, Corvus corax principalis	n, N. Y..	rare	.....
488.	Crow, Corvus brachyrhynchos	ab, Apr. 20	ab, r	.....
490.	Fish Crow, C. ossifragus	c, May 15	csr, r	.....
493.	Starling, Sturnus vulgaris	intro	intro	.....
494.	Bobolink, Dolichonyx oryzivorus	c, May 30	csr	May 5..
495.	Cowbird, Molothrus a. ater	c, May 5.	csr	May 15
497.	Yell.-headed Blackbird, X. xanthocephalus	.....	ac	.....
498.	Red-wing, Blackbird, Agelaius p. phoeniceus	ab, May15	ab, sr	Mar. 1.
501.	Meadowlark, Sturnella m. magna	ab, May15	ab, sr, v	Mar. 1.
506.	Orchard Oriole, Icterus spurius	c, May 30	csr	May 5.
507.	Baltimore Oriole, I. galbula	c, May 25	csr	May 1.
508.	Bullock Oriole, I. bullocki	.....	ac	.....
509.	Rusty Blackbird, Euphagus carolinus	n, N. Y.	ctv	Mar. 1.
511.	Purple Grackle, Quiscalus q. quiscula	c, May 1.	csr	Mar. 1.
511b.	Bronzed Grackle, Q. quiscula aeneus	c, May 1.	csr	Mar. 1.
514.	Evening Grosbeak, Hesperiphona vespertina	.....	rare, wv	.....

No.	Name.	Breeds	Occurs	Arrives
515.	Pine Grosbeak. Pinicola enucleator leucura	.....	wv	.....
***	English Sparrow, Passer domesticus.....	ab, intro	ab, r.....	.....
517.	Purple Finch. Carpodacus p. purpureus..	c, May 20	csr, wr..	Apr. 1.
521.	Crossbill. Loxia curvirostra minor.....	n, N. Y..	wv	.....
522.	White-winged Crossbill. L. leucoptera....	n, N. Y..	rare, wv	.....
527a.	Hoary Redpoll. Acanthis hornem. exilipes.	.....	rare, wv	.....
528.	Redpoll. A. linaria.....	.....	ab, wv..	.....
528a.	Holboell Redpoll. A. l. holboelli..	.....	rare, wv	.....
528b.	Greater Redpoll. A. l. rostrata.....	.....	rare, wv	.....
529.	Goldfinch. Astragalinus tristis.....	c, June 30	cr.....	.....
533.	Pine Siskin. Spinus pinus.....	n, N. Y..	wv, ctv.	.....
***	European Goldfinch. Carduelis carduelis...	intro....	intro.....	.....
534.	Snow Bunting. Plectrophenax n. nivalis..	.....	ab, wv..	.....
536.	Lapland Longspur. Calcarius l. lapponicus.	.....	rare, wv	.....
538.	Chestnut-collared Longspur. C. ornatus...	.....	ac	.....
540.	Vesper Sparrow, Pooecetes g. gramineus.	ab, May 15	ab, sr...	Apr. 5.
541.	Ipswich Sparrow. Passerculus princeps...	.....	wv	.....
542a.	Savannah Spar. P. sandwichensis savanna.	local	ctv, sr...	Apr. 1.
545.	Baird Sparrow. Ammodramus bairdi.....	.....	ac	.....
546.	Grasshopper Sparrow. A. savan. australis..	c, May 30	csr	May 5.
547.	Henslow Spar. Passerherbulus, h. henslowi	c, May 20	csr	May 1.
548.	Leconte Sparrow. P. lecontei.....	.....	ac	.....
549.	Sharp-tailed Sparrow. P. caudacutus.....	c, May 30	csr	.....
549.1.	Nelson Sparrow. P. n. nelsoni.....	.....	ctv	.....
549.1a	Acad. Sharp-tailed Spar. P. n. subvirgatus	.....	rare, tv.	.....
550.	Seaside Sparrow. P. m. maritimus.....	c, May 30	csr, ac ..	.....
552.	Lark Sparrow, Chondestes g. grammacus..	n, N. Y..	unc, tv..	May 10
554.	White-cr. Sparrow. Zonotrichia, l. leucophrys	.....	ctv, sr ..	May 1.
558.	White-throated Sparrow. Z. albicollis.....	.....	.....	.....
559.	Tree Sparrow. Spizella m. monticola.....	.....	ab, wv..	Nov. 1.
560.	Chipping Sparrow. S. p. passerina.....	ab, May 15	ab, sr ...	Apr. 1.
563.	Field Sparrow. S. p. pusilla.....	ab, May 15	ab, sr...	Apr. 1.
567.	Slate-colored Junco. Junco. h. hyemalis...	n, N. Y..	cwv, sr..	.....
581.	Song Sparrow. Melospiza m. melodia.....	ab, May 1	ab, sr....	.....
583.	Lincoln Sparrow. M. l. lincolni.....	.....	rare, tv.	.....
584.	Swamp Sparrow. M. georgiana.....	c, May 15	csr	Mar. 20
585.	Fox Sparrow. Passerella i. iliaca.....	.....	ab, tv....	Mar. 15
587.	Towhee. Pipilo e. erythrophthalmus.....	ab, May 15	ab, sr....	Apr. 20
593.	Cardinal. Cardinalis c. cardinalis.....	c, local..	r.....	.....
595.	Rose-br. Grosbeak. Zamelodia ludoviciana.	c, May 20	csr.....	May 5.
597.	Blue Grosbeak. Guiraca c. caerulea.....	.....	ac	.....
598.	Indigo Bunting. Passerina cyanea.....	c, May 30	csr	May 5.
601.	Painted Bunting, P. ciris.....	.....	ac	.....
604.	Dickcissel. Spiza americana.....	rare	rare, sv.	.....
605.	Lark Bunting. Calamospiza melanocorys...	.....	ac	.....
608.	Scarlet Tanager. Piranga erythromelas...	c, June 1	csr	May 5.
610.	Summer Tanager. P. r. rubra.....	.....	rare, sv.	.....
611.	Purple Martin, Progne subis.....	May 25..	unc, sr..	May 1.
612.	Cliff Swallow. Petrochelidon l. lunifrons...	c, May 30	csr	May 5.
613.	Barn Swallow. Hirundo erythrogastra....	ab, May 20	ab, sr...	Apr. 20
614.	White-bellied Swallow. Iridoprocne bicolor	c, May 20	csr	Apr. 5.
616.	Bank Swallow. Riparia riparia.....	ab, May 20	ab, sr...	Apr. 25
617.	Rough-wing Swallow. Stelgidopteryx serri.	May 30..	csr	Apr. 25
618.	Bohemian Waxwing. Bombycilla garrula..	.....	rare, wv	.....
619.	Cedar Waxwing. B. cedrorum	c, June 20	csr, wr..	.....
621.	Northern Shirke. Lanius borealis.....	.....	wv	.....
622e	Migrant Shrike. L. ludovicianus migrans...	local	r.....	.....
624.	Red-eyed Vireo. Vireosylva olivacea.....	c, May 25	csr	May 1.
626.	Philadelphia Vireo. V. philadelphica.....	.....	rare, tv.	.....
627.	Warbling Vireo. V. g. gilva.....	c, May 30	csr	May 1.
628.	Yell.-throated Vireo. Lanivireo flavifrons..	c, May 25	csr	Apr. 25
629.	Blue-headed Vireo. L. s. solitarius.....	local	ctv, sr...	Apr. 20
631.	White-eyed Vireo. Vireo g. griseus.....	c, May 25	csr	May 1.
636.	Black and Wh. Warbler. Mniotilta varia..	c, May 20	csr	Apr. 25
637.	Prothonotary Warbler. Protonotaria citrea	.....	ac, sv....	.....
639.	Worm-eating Warb. Helmitheros vermivorus	local	local, sr.	.....
641.	Blue-winged Warbler. Vermivora pinus...	c, May 25	csr	May 5.

No.	Name.	Breeds	Occurs	Arrives
642.	Golden-winged Warbler. V. chrysoptera...	May 30..	unc, sr..	May 10
*** .	Lawrence Warbler. V. lawrencei	rare.....	rare, tv.	.....
***	Brewster Warbler. V. leucobronchialis....	rare.....	rare, sr.	.....
645.	Nashville Warbler. V. rubricapilla.....	May 25..	ctv, sr...	May 1.
646.	Orange-crowned Warbler. V. c. celata.....	.....	rare, tv.	.....
647.	Tennessee Warbler. V. peregrina.....	rare.....	tv, sr....	May 10
648a.	Parula Warbler. Compsothlypis am. usneae	c, May 25	csr	May 5.
650.	Cape May Warbler. Dendroica tigrina....	.....	rare, tv.	May 10
652.	Yellow Warbler D. a. aestiva.....	c, May 20	csr	May 1.
654.	Black-thr. Blue Warbler. D. c. caerulescens	local	ctv, sr...	May 5.
655.	Myrtle Warbler. D. coronata.....	.....	ctv, wr..	Apr. 1.
657.	Magnolia Warbler. D. magnolia.....	local	ctv. sr ..	May 5.
658.	Cerulean Warbler. D. caerulea.....	unc.w.N Y	rare, sr	.....
659.	Chestnut-sided Warbler. D. pensylvanica..	c, May 25	csr	May 5.
660.	Bay-breasted Warbler. D. castanea.....	.....	tv	May 15
661.	Black-poll Warbler. D. striata.....	.....	ab, tv...	May 10
662.	Blackburnian Warbler. D. fusca.....	c, n, N.Y	ctv	May 15
663.	Yell.-throated Warbler. D. dominica....	.....	ac	.....
665.	Black-thr. Green Warbler. D. virens.....	c, May 25	csr	Apr. 25
671.	Pine Warbler. D. Vigorsi.....	May 25..	ctv, sr ..	Apr. 15
672a.	Yellow Palm Warbler. D. palmarium hypo.	.....	ctv	Apr. 15
673.	Prairie Warbler. D. discolor.....	local	sr.....	May 5.
674.	Oven-bird. Seiurus aurocapillus.....	ab,May20	ab, sr...	Apr. 20
675.	Water-Thrush. S. n. noveboracensis.....	local	ctv, sr...	May 1.
675a	Grinneli Water-Thrush. S. n. notabilis....	.....	rare, tv.	.....
676.	Louisiana Water-Thrush. S. motacilla.....	c, May 15	csr	Apr. 15
677.	Kentucky Warbler. Oporornis formosus...	c, June 1	csr	May 10
678.	Connecticut Warbler. O. agilis.....	.....	ctv, fall.	.....
679.	Mourning Warbler. O. philadelphia.....	.....	rare, tv.	.....
681.	Maryland Yellow-throat. Geothlypis trichas	ab,May25	ab, sr ..	May 5.
683.	Yellow-breasted Chat. Icteria v. virens...	c, May 25	csr	May 5.
684.	Hooded Warbler. Wilsonia citrina.....	c, May 20	csr	May 5.
685.	Wilson Warbler. W. p. pusilla.....	.....	ctv	May 10
686.	Canada Warbler. W. canadensis.....	n, N. Y..	ctv, sr...	May 10
687.	Redstart. Detophaga ruticilla.....	c, May 20	csr	May 1.
697.	Pipit. Anthus rubescens.....	.....	ab, tv....	.....
703.	Mockingbird. Mimus p. polyglottos.....	local	unc, sr...	.....
704.	Catbird. Dumetella carolinensis.....	ab,May20	ab, sr...	Apr. 25
705.	Brown Thrasher. Toxostoma rufum.....	ab,May20	ab, sr...	Apr. 25
718.	Carolina Wren. Thryothorus ludovicianus.	local	r.....	.....
721.	House Wren. Troglodytes a. aedon.....	c, May 20	csr	Apr. 25
722.	Winter Wren. Nannus h. hiemalis.....	n, N. Y...	cwv, sr..	.....
724.	Short-bill. Marsh Wren. Cistoth. stellatus.	June 1..	sr.....	May 10
725.	Long-bill. Marsh Wren. Telmato. palustris.	June 1...	ab, sr ...	May 10
726.	Brown Creeper. Certhia Familiaris am....	n, N. Y..	ctv, sr ..	.....
727.	White-br. Nuthatch. Sitta c. carolinensis..	c, May..	r.....	.....
728.	Red-breasted Nuthatch. S. canadensis....	n. N. Y..	ctv, sr...	.....
729.	Brown-headed Nuthatch. S. pusilla.....	.....	ac	.....
731.	Tufted Titmouse. Parus bicolor.....	local	r.....	.....
735.	Chickadee. Penthestes a. atricapillus.....	ab,May20	cr.....	.....
736.	Carolina Chickadee. P. c. carolinensis....	.....	sr.s, N.Y.	.....
740a.	Acadian Chickadee. P. hudsonicus littoralis	mts	r.n, N.Y.	.....
748.	Golden-cr. Kinglet. Regulus s. satrapa....	local	ctv, sr...	.....
749.	Ruby-crowned Kinglet. R. c. calendula....	.....	ctv	Apr. 20
751.	Blue-gray Gnatcatcher. Polioptila caerulea	rare.....	rare, sv.	.....
755.	Wood Thrush. Hylocichla mustelina.....	ab,May20	ab, sr...	Apr. 25
756.	Wilson Thrush. H. f. fuscescens.....	c, May 20	csr	May 1.
757.	Gray-cheeked Thrush. H. a. aliciae.....	.....	ctv	May 10
757a	Bicknell Thrush. H. a. bicknelli.....	mts	rare, tv.	.....
758a.	Olive-backed Thrush. H. ustulata swains..	local	ctv, sr...	May 10
759b.	Hermit Thrush. H. guttata pallasi.....	mts	ctv, sr...	Apr. 10
761.	Robin. Planesticus m. migratorius.....	ab,Apr.20	csr. r....	.....
763.	Varied Thrush. Ixoreus n. naevius.....	.....	ac	.....
765a.	Greenland Wheatear. Saxicola o. leucorhoa	.....	ac	.....
766.	Bluebird. Sialla s. sialis.....	ab,Apr.20	csr	.....

LAND BIRDS

By CHESTER A. REED, S. B.

An illustrated, pocket text book that enables anyone to quickly identify any song or insectivorous bird found east of the Rocky Mountains. It describes their habits and peculiarities; tells you where to look for them and describes their nests, eggs and songs.

EVERY BIRD IS SHOWN IN COLOR, including the females and young where the plumage differs, from water-color drawings by the 4-color process. The illustrations are the BEST, the MOST ACCURATE, and the MOST VALUABLE ever printed in a bird book.

"LAND BIRDS" is the most popular and has had the LARGEST SALE of any bird book published in this country. It is used and recommended by our leading Ornithologists and teachers. 230 pages.

Bound in Cloth, 75c. net; in Leather, $1.00 net; postage, 5c.

WATER BIRDS

By CHESTER A. REED, S. B.

This book is uniform in size and scope with LAND BIRDS. It includes all of the Water Birds, Game Birds and Birds of Prey, east of the Rockies. Each species is ILLUSTRATED IN COLOR from oil paintings; the bird, its habits and nesting habits are described.

The pictures show more than 230 birds in color, every species found in our range. They exceed in number those in any other bird book. In quality they cannot be surpassed—exquisite gems, each with an attractive background typical of the habitat of the species.

"LAND BIRDS" and "WATER BIRDS" are the only books, regardless of price, that describe and show in color every bird. 250 pages, neatly boxed.

Bound in Cloth, $1.00 net; in Leather, $1.25 net; postage, 5c.

CAMERA STUDIES OF WILD BIRDS IN THEIR HOMES

By CHESTER A. REED, S. B.

Interesting text and 250 illustrations from actual photographs of living wild birds. Some of the finest ever made. 300 pages, 5½ x 7½, cloth bound.

$2.00 net; postage, 20c.

FLOWER GUIDE

By CHESTER A. REED, S. B.

A guide to the common wild flowers found in the Eastern and Middle States.

Wild Flower Guide is the same size and scope as Bird Guide. It has an extraordinary sale and has been adopted and used in quantities in many of our leading colleges and schools.

The COLORED ILLUSTRATIONS, 192 in number, are beautiful, artistic and accurate reproductions from oil paintings; the finest series ever made. The text tells where each is found, when it blooms, whether in woods, fields, swamps, etc., the height that the plant attains, whether it is self-fertilized or cross fertilized by insects and how; in fact it gives a great deal more information than one would think possible in a book to fit comfortably in the pocket.

Bound in Cloth, 75c.; in Leather, $1.00; postage, 5c.

NORTH AMERICAN BIRDS' EGGS

By CHESTER A. REED, S. B.

This is the only book on the market that gives illustrations of the eggs of all North American birds. Each egg is shown FULL SIZE, photographed directly from an authentic and well marked specimen. There are a great many full-page plates of nests and eggs in their natural situations.

The habitat and habits of each bird are given.

It is finely printed on the best of paper and handsomely bound in cloth. 350 pages—6 x 9 inches.

$2.50 net; postage 25c.

NATURE STUDIES—BIRDS

A book to start the young folks along the right paths in the study of birds. Interesting stories. 40 colored illustrations. 112 pages.

60c net; postage, 10c.

NATURE STUDIES IN FIELD AND WOOD

A book to call attention to the many interesting creatures to be seen on every hand,—in brook, pond, field, swamp, woods and even in the dooryard. 40 illustrations. 112 pages.

60c net; postage, 10c.

Birds of Eastern North America

BY CHESTER A. REED, S. B.

Author of "Land Birds," "Water Birds," "North American Birds' Eggs," "Color Key to North American Birds" (with Frank M. Chapman), etc.

This will undoubtedly be THE BIRD BOOK of the year. Nothing has ever approached "Land Birds" or "Water Birds" as guides for the identification of birds. It is doubtful if any book will for many, many years appear, which is the equal of the present one in value and completeness of text and illustrations and at anywhere near as low a price.

It is authentic. The author KNOWS birds. He has studied them for thirty years,—in the hand, for plumage, and in their haunts, for habits. He has studied them in their homes and has photographed hundreds as they were actually feeding their young. Besides being able to write about these things in an interesting and instructive manner, he is classed as one of the foremost bird artists in America. This rare combination of Artist-Author-Naturalist has produced, in "Birds of Eastern North America," the ultimate bird book.

The technical descriptions aided by the pictures give perfect ideas of the plumages of adults and young.

The descriptive text gives the important and characteristic fea- in the lives of the various species.

The illustrations,—well, there are 408 PICTURES IN NATURAL COLORS; they show practically every species including male, female and young when the plumages differ, and they are perfectly made by the best process. No other one bird book ever had anywhere near as many accurately colored pictures.

Bound in cloth, handsomely illuminated in gold; 464 pages (4½ x 6½); 408 colored illustrations; every bird described and pictured.

$3.00 net; postage 15c.

MOHONK SALESROOMS, Mohonk Lake, N. Y.

FIELD GLASSES FOR BIRD STUDY

or equally good for the mountains, sea shore or theatre, or wherever a large, clear image of an object is desired.

We carefully examined more than a hundred makes of field glasses, to select the ones best adapted for bird study.

We found one make that was superior to any other of the same price and equal optically, and nearly as well made as those costing three times as much.

They magnify about three diameters, and have an unusually large field of vision or angle of view, making it easy to find a bird or keep him in sight. Price only $5.00 postpaid.

MOHONK SALESROOMS, Mohonk Lake, N. Y.

TY OF ORNIA LIBR

IVERSITY OF CAL

UC SOUTHERN REGIONAL LIBRARY FACILITY

A 000 887 969 4